

Amy's Story: A Research Agenda for Smoking Cessation in Pregnancy

Introduction

The purpose of this paper is to report on a case from Nottinghamshire County Primary Care Trust (PCT) as an exploratory study examining the role of social marketing's contribution to smoking cessation during pregnancy. Insights from the case will be used to inform and stimulate debate around future inquiry regarding the effectiveness of such campaigns, specifically with respect to smoking cessation in pregnancy, the role of low-budget highly-localised programmes and, in response to a recent Chartered Institute of Marketing (CIM) paper (Thorp, 2009), the extent to which social marketers lead the way in producing behavioural change in populations. Whilst well discussed in the health literature, smoking cessation during pregnancy remains under-researched in the marketing literature offering opportunities for research and practice. Also, this study is of contemporary interest in light of the proposed public sector cuts which will restrict social marketing budgets, the move of Public Health to local authority control placing it as central to the Government's public health plans, and the Government's reported interest in behavioural change techniques such as nudge theory (Stamp, 2010). The paper is structured by presenting the case using The National Social Marketing Centre's (NSMC, 2010) benchmark criteria for effective social marketing, whilst identifying findings and themes from the literature.

Background

Smoking is the UK's largest single cause of preventable illness and premature death, accounting for approximately 20% of all deaths (Tobacco Advisory Group, 2002). In the East Midlands the prevalence amongst women aged 16 to 24 and 25 to 34 stood at 28.1% and 36% respectively. Bauld (2008) notes that pregnant women under 20 are more likely to smoke than older women. Pickett et al. (2009) note that the risks from smoking during pregnancy include foetal growth restriction, shorter gestation and perinatal mortality, with Lowry et al. (2004) adding higher rates of miscarriage and sudden infant death syndrome. In addition, as Lawrence and Haslam (2007) note, pregnancy offers a significant opportunity for anti-smoking interventions as it is one of the few times that women have regular contact with health professionals. The Smoking Kills white paper (Department of Health, 1998) established policy direction for PCTs, reinforced by other policy documents such as Choosing Health white paper (Department of Health, 2004) and public health guidance PH10 (Bauld and Coleman, 2009). This national policy resulted in establishment of local targets for PCTs one of which in Nottinghamshire is a 6% reduction in the pregnant women smoking at delivery (Brady, 2007). As a result the PCT is committed to providing effective support for those who wish to quit and to monitoring smoking prevalence and smoking quitters.

The 'Amy the Quitter' Campaign

The campaign centred around the production of a film to be distributed online via the PCT's web site and on DVD for use in face-to-face settings by community midwives and for use in hospital pregnancy, post-natal day care and ward settings. It was conceived to achieve two primary objectives: to encourage pregnant women to inform their midwife if they smoke, and to make women aware of the benefits of nicotine replacement therapies. From the start it was felt that these messages would be better received if they came from a smoking quitter rather than from a health care professional and this was in line with DVDs being produced by other sections of the Tobacco Control Team in the PCT. The production budget was £500 and 300 hard copies were produced. The Tobacco Control Team initially had difficulty in recruiting someone who was prepared to be interviewed for the DVD. Anecdotally, it was felt that women were generally unwilling to admit that they smoked while pregnant, and research has shown that pregnant women under-report smoking (Bauld, 2008), a finding that supports one of the campaign's objectives. The DVD was the result of a three hour semi-structured

interview with continuous filming. Selection of content was on the basis of revealing new insights, highlighting the pre-quitting relationship with cigarettes, avoiding the well rehearsed statements regarding smoking and ill health, focusing on the subject's experiences, feelings and motivations. The campaign is in the process of being evaluated and this will be based on the PCT's local targets. De Gruchy and Coppel (2008) argue that small-scale local campaigns can be difficult to evaluate; research by the Public Health Research Consortium (2010) suggests that a programme with a budget of £500 would need to produce fourteen or more quitters to justify itself on cost.

Amy The Quitter Analysed via the NSCM's (2010) Social Marketing Model

Customer Orientation

Pickett et al. (2009) note that the former Health Development Agency had raised concerns that little is known about how to improve rates of smoking cessation among disadvantaged pregnant women, despite setting ambitious targets. They suggest that cessation programmes may be more successful if informed by an understanding of the individual psychosocial problems that face individuals. They suggest these problems may explain why smoking in pregnancy has been so problematic. This highlights the need to adopt a customer orientation which takes account of these psychosocial factors. Such approaches are not new in marketing (Belk, 1988 and Sargeant, 2005). Therefore, Amy's Story shows that an attempt has been made to understand the totality of the customer's life with a number of elements considered; the relationship with the infant, home life, work life, relationship with partner, relationship with midwife, the pregnancy and labour itself and relationships with friends. Whilst much of the literature advocates the use of fear appeals or warnings for anti-smoking messages (see for example Schmitt and Blass, 2008 and Gallopel-Morvan *et al.*, 2009), it appears as though the advantageous side-effects motivate Amy, in particular the removal of the smell. Thus, there are no direct health messages as such although there is a reminder; the focus is on the short-term benefits to the customer rather than the long-term health benefits to the customer and the infant. Likewise, Walsh *et al.* (2010) find that for anti-smoking campaigns the clarity and likeability of messages is important and fear appeals may be ineffective for some groups. There is therefore a need for further research to investigate the success of the promotion of benefits in smoking cessation with this group.

Behaviour Change

Lowry *et al.* (2004) find that barriers to smoking cessation include a lack of satisfactory information and short term support, and a lack of enthusiasm or empathy from healthcare professionals. Lawrence and Haslam, (2007) suggest this may be because many midwives are reluctant to address smoking for fear of alienating their patients due to the social stigma attached to smoking in pregnancy. However, they also argue that research demonstrates women would welcome such interventions, and Wareing (2010) notes that there is general agreement that midwives play a critical role in effective smoking cessation initiatives. In *Amy's Story* behaviour is therefore addressed in a subtle way. The first behaviour change is to encourage the trial of nicotine replacement therapy. The second is to make the midwife aware of the smoking despite the tendency to under-report. Amy describes contacting her midwife about her desire to give up smoking as the best thing she ever did. She also confirms that she had not been aware that nicotine replacement was an appropriate therapy in pregnancy. Thus the two targeted behavioural changes are directly addressed. The health impacts of smoking on the mother and baby are not addressed so directly. The option of reducing the amount smoked is not encouraged, in line with NICE Public Health Guidance 26 (NICE, 2010), and because the reduction in the number of cigarettes smoked is often accompanied by deeper inhalation. Interestingly, acknowledging that women who smoke during pregnancy often live in circumstances where quitting is difficult, *Amy's Story* highlights the important role played by partners.

Segmentation

Walsh *et al.* (2010) stress the importance of segmenting markets for social marketing campaigns aimed at smoking cessation. Nottinghamshire PCTs' public health departments have identified a number of key groups based on the extent to which they are at risk and influence other groups. Similarly, Walsh *et al.* (2010) recommend identifying 'clusters' of smokers which relate to their levels of engagement, with those with a strong desire to quit being more receptive to anti-smoking campaigns. In addition to responding to the NICE guidance PH 26 (NICE, 2010) pregnant women are a useful segment to target with anti-smoking campaigns for a number of reasons, and the Royal College of Physicians (2010) argue that these women may influence and educate in relation to health risks to the baby both vertically and horizontally; if the pregnant woman quits, the generational cycle of smoking may be broken to the benefit of future generations. This micro segmentation allows for rich understanding of what *moves and motivates* the customer (NSMC, 2010). It also allows social marketers to get closer to their subjects and to concentrate their resources in a way that commercial marketers would find difficult and thus make the most of limited budgets. Amy is part of a specifically targeted group; at one level was the fact that she was pregnant but she was also someone who was 'ready to quit'. As noted by Lawrence and Haslam (2007), allocation to a stage of change is central to an effective process of behaviour change. Individuals can be assigned to a particular stage by assessing their intention to quit. They recommend including stages of change alongside cognitive-experiential and behavioural strategies used to modify behaviours, decisional balance, self-efficacy and temptation. As suggested by Lawrence and Haslam (2007) and De Gruchy and Coppel (2008), Prochaska and Diclemente's *stages of change* model provides a useful framework for further application of stages of 'readiness'; Amy was at the preparation and action stages as she had tried to give up many times. Recognising this, the campaign devised by the PCT makes no attempt to utilise mass media vehicles but concentrates on the more self-directed approaches. This focus as the principle basis for segmentation is in contrast to other reported campaigns in Nottingham and Stoke-on-Trent which used geographic segmentation and demonstrated results that were moderate at best (De Gruchy and Coppel, 2008 and Richardson [no date]), although the Stoke-on-Trent study did go on to reveal a number of behaviour based segments. This focus on behavioural elements and the intimacy between the subject and the social marketers can allow for effective behavioural interventions. Whilst Bauld and Coleman (2009) note that using the stages of change approach in smoking cessation has produced variable results in research to date, this appears to be crucial in Amy's story. Further research should therefore seek to understand the potential role for such models in delivering cost-effective interventions.

Insight

Insight is defined by the NSMC (2010) as the development of a deep understanding of what motivates the target audience. This requires a recognition of the consumer as an individual (Belk, 1988) and was developed by consumer researchers including Hamilton and Hassan (2010) specifically in relation to smoking cessation. Thus, as proposed by Hirschmann and Holbrook (1986), insight must be developed interpretively by personal involvement with the consumer; arguably this is best done by midwives and the case presented here is a good example of how detailed insight was developed at the individual level (compared, for example, with the £10,000 spent on market research in Nottingham City in the study by De Gruchy and Coppel, 2008). The key insights developed here are that Amy was not motivated by the impact of smoking on her own health: initially she was concerned with the shame associated with putting her baby in harm's way. One of the key motivations was the smell. She also describes enjoying the extra time in bed and how the support of her husband had a positive affect on their relationship. A key benefit was the self-efficacy of taking control of

aspects of her life, in particular the ability to cope with stress without having to resort to cigarettes and enjoying the sense of achievement of recording a zero in the carbon monoxide readings. Amy also suggests that having to contact the midwife was potentially a barrier to taking action. The insights developed reveal the importance of understanding what motivates at the individual level, but also support existing findings relating to the promotion of benefits rather than fear appeals (Gallopel-Morvan et al, 2011, Lowry et al., 2004), and the benefits associated with carbon monoxide testing (Bauld and Coleman, 2009). Whilst carbon monoxide testing has a role to play in detecting smoking, the case reveals the potential for the test as a motivator in itself.

Theory

The NSMC (2010) recommends a number of applicable theories. In the case, some of these theories can be broadly identified as follows: *social learning theory*; Amy's grandparents, partner and friends learn from an influential role model. *Social capital theory*: Amy re-sets what is considered normal behaviour, replacing smoking with not smoking in the home setting and establishes this new behaviour as the norm. *Social norms theory*; Amy reflects on the normal behaviour of her social group at work and describes how she replaces the behaviour and the group and now conforms to the behaviours of the new work group. *Stages of change theory*; see section 3 above. *Goal-setting theory*: Amy uses the carbon monoxide monitor to help her set goals and monitor her progress. *Health action process approach*; the DVD is targeted at individuals who are seeking to change behaviour but require help in the form of support from their midwife. *Reinforcement theory*; Amy rewards herself with an extra 20 minutes in bed and a five minute walk in the fresh air to replace smoking time during work and by celebrating her sense of achievement when the monitor reads zero. *Theory of reasoned action*: Amy appears to suggest that the social norm for 'good' mothers is that they don't knowingly put their babies in harm's way and she is aware of what is constraining her ability to perform the desired behaviour. The extent that it is realistic to expect practitioners to have a working knowledge of such an array of social theories could be questioned, and there is a danger in retro-fitting theories to the case. Equally, the emphasis on theory seems to deny the social marketer the right to use their intuition and professional judgement and this is an area that would benefit from further conceptual development.

Competition

Stead et al. (2006) note the importance of utilising the 'competition concept' at both the external and internal level. The primary competing behaviour at the external level is relatively clear, for example Walsh et al. (2010) note that tobacco manufacturers recognise heterogeneity in their markets and have responded accordingly by developing brands aimed at women, with strategies targeting both those who have recently started smoking and those concerned about the risks of smoking. However, the internal factors are perhaps those which are more significant for consumers. For example, Hamilton and Hassan (2010) apply the 'social self-concept' to smoking, noting that for the majority, smoking results in social disapproval from others and smokers therefore adopt 'coping' strategies to deal with this stigma. Internal factors therefore include the physical and psychological addiction. However, Amy also discusses the positive social effects of smoking; being able to take breaks from work, conforming to the norms of her smoking friends and having to avoid them after quitting: "...that was the bit I missed the most, the social side of smoking, whereas me and my team would go for a cigarette and we'd chat over what's been happening that day... I felt like I was missing out on that." It is likely that this competition is one of the major barriers to quitting, although research to date has largely ignored these aspects of competition. Further research may consider the role of smoking as a 'social tool' and the role of smoking in consumers' senses of identity and how this may be overcome by social marketers tasked with encouraging people to quit.

Exchange

Exchange theory emphasises the need to maximise the benefits and minimise the costs of engaging in a new behaviour. As previously highlighted, these are likely to be rooted in the perspective and experience of the individual. Amy reveals that the benefits for her lie in increased enjoyment of her baby (smell), the sense of achievement, improvements in the relationship with her partner and increased time. As Amy explains: *“I used to just cuddle him in and smell the top of his head... and it was the most amazing smell... I couldn't have done that if I'd still been smoking, because he would have smelt like me, he would have smelt like cigarettes.”* Barriers included the difficulty of and loneliness in quitting, the removal of ‘social’ benefits and work breaks, and the shame involved in telling the midwife. The case also reveals the use of exchange in overcoming barriers. For example, exchanging one type of social enjoyment (smoking with work colleagues) with another (walking with work colleagues) and the negatives of smoking (smell, control of aspects of life) with positives (sense of control and achievement). There is therefore a role for research to understand which key benefits and barriers are perceived by target groups and how the role of exchange can be used to overcome them.

Conclusions and recommendations

Whilst this paper only presents a single case, it reveals a number of insights which, linked with a review of the literature, provides some clear recommendations for future marketing research and practice. With regard to research, it is noted that whilst there is an emerging body of knowledge in the public health arena, there is little in marketing literature. This is problematic, as the role for social marketing professionals in informing effective interventions is significant. It is recommended that future research should: investigate the promotion of specific benefits rather than fear or threat appeals, and which messages appeal to specific groups; explore more fully the role of the stages of change model in segmentation; employ phenomenological methods of enquiry to develop deep consumer insights at the level of the individual, exploring the role of midwives in this; engage in further conceptual development to develop a body of theoretical knowledge which can be usefully employed by health professionals; and further investigate specific target groups’ perceptions of their key benefits and barriers. In terms of practice, three key recommendations emerge from the study. Firstly, that the behaviour change is not primarily seen as being to ‘quit’ smoking, but to make the midwife aware of the smoking and to trial nicotine replacement therapy. Secondly, throughout the case the importance of the role of the midwife is highlighted. It is therefore recommended that further consultation is undertaken with midwives and that they are trained in social marketing strategy and techniques. If midwives are able to identify the factors which motivate individuals and apply social marketing tools to encourage their patients to ‘quit’, success rates are likely to be improved. Finally, whilst a full evaluation of the campaign is currently underway, the use of ‘success stories’ to inform and influence others in this way is a cost-effective means of communicating directly to the target audience.

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