Triggers and other motivators – possible factors encouraging health behaviour change

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Abstract

Aims: To understand what behaviours were considered healthy by members of the public, what health behaviour changes to try to become healthier were most frequently attempted, and how common it was to seek to make such behavioural change. To also explore what factors encourage people to make and sustain health behaviour change.

Method: Face to face interviews were conducted with 1003 people, predominantly in Greater London. A semi structured interview schedule was used, which provided both qualitative and quantitative data. Basic demographic information was also collected.

Results: 87% of people interviewed reported trying to make a health behaviour change. Of these, 98% reported making changes known to be healthy (such as stopping smoking) and 2% chose other changes (such as detox). 69% seeking to make a change reported they had succeeded.

The most common reasons cited for seeking to make a change were to be healthier, fitter or feel better; to lose weight; or if they or someone close to them had experienced a health problem. The most common reasons cited for sustaining change were positive results; will power; knowing it is better for you; family or friends; or a health problem (their own or someone close).

Conclusions: Most people know the basics i.e. not to smoke, to eat a healthy diet and to get enough exercise. The public health challenge is therefore to encourage people to act on what they already know is good for them. However, the health risks of alcohol may currently be underestimated.

The desire to be healthier and fitter and feel better should not be underestimated. For those with less intrinsic motivation there appear to be a number of identifiable trigger points in their lives when they appear likely to be more open to advice from health professionals, in particular when they are pregnant, when they have children, when they or someone close to them has been diagnosed with an illness, or as they get older.

Key Words: Health Behaviour Change, Preventable Illnesses, Healthy lifestyle

INTRODUCTION

'Preventative illnesses are overwhelming the NHS; illnesses caused by obesity, smoking, alcohol and lack of exercise.' (1)
All Party Parliamentary Group on Primary Care and Public Health 2013

Preventable illnesses are a significant public health challenge facing the developed world, with major cost implications. In the UK for example:

We have known for sixty years that smoking significantly increases health risks, yet millions of people still smoke. (2) The risks of excessive alcohol consumption have also been known for many years, yet in 2015 the Heath & Social Care Information Centre (HSCIC) reported that 15% of adults still binge drink. (3) Poor diet costs the NHS an estimated £6 billion a year, according to the 2015 British Medical Association (BMA) report *Food for Thought.* (4) Many billions of pounds are spent on treating diseases such as type 2 diabetes, which could be prevented if we did just 30 minutes of physical activity five times a week – according to the Academy of Medical Royal Colleges in 2015. (5)

The *Healthy and Wealthy?* Report (6) identified that both the food industry and government have key roles to play. They need to help make healthy choices easy for people, for instance by ensuring that mass produced food contains less sugar, salt and saturated fat and more dietary fibre. To complement action by business and by government, individuals also need to make healthy lifestyle choices. However, simply providing public health information often appears to have limited effect, as seen by a range of indicators, from the millions of people still smoking to current levels of obesity.

Triggers that motivate health behaviour change is a current topic, informing many areas of health psychology including smoking (7), obesity (8,9), and general health changes (10). It is therefore important to research how healthy lifestyle choices can be encouraged in practice and what contribution health professionals can make here.

AIMS

This exploratory study aimed to understand:
1. What behaviours members of the public considered healthy
2. What changes to try to become healthier were most likely to be attempted.
3. What factors appeared to encourage people to make and sustain health behaviour change.

METHOD

1003 respondents were recruited in various locations, primarily across Greater London, through opportunity sampling for face-to-face interviews.

Of those interviewed, 51% were female and 33.5% from ethnic minorities. 23% of respondents were in their twenties, 22% in their thirties, 18% in their forties, 19% in their fifties and 18% aged 60+.

To seek to ensure responses were as spontaneous and unprompted as possible open-ended questions were asked about the respondent's adoption of, motivation for and adherence to health behaviour change, and no possible answers were shown or suggested. For example, participants were asked if they had ever tried to change something in their life to try to become healthier, if so why, if they had succeeded and if anything in particular had helped them maintain the change. In addition, basic demographic information was collected i.e. age range, gender and ethnic origin.

The method was consciously exploratory in nature, using open-ended questions as opposed to previously established psychometric tools. This was intended to identify psychological factors that determine health behaviour change in people without restricting the respondents' answers or assuming a specific psychometric structure.

A template was developed and piloted to record the responses. This enabled qualitative data to be collected (i.e. the actual words used by respondents) and also allowed this raw data to subsequently be collated and recorded on an EXCEL spreadsheet to provide quantitative data for analysis.

IBM SPSS statistics software was then used for in depth data analyses. Responses from the open-ended questions were coded based on frequencies of the qualitative data. A principal component analysis (PCA) was conducted with varimax rotation. Using this data reduction technique we identified the factors associated with health behaviour change. Accordingly, multiple linear regression analyses were conducted to explore the relationship between demographic factors and (i) motivators behind making a change, (ii) action taken, and (iii) factors which helped to sustain the change.

In line with our Ethics Approval Policy, no identifiable personal data was sought or recorded; and participants were provided with relevant information about the study (including the organisation conducting the survey, its purpose, its voluntary nature and the likely duration of the interview).

RESULTS

Of the 1003 people interviewed, 87% reported they had changed something they normally did to try to become healthier. Without being prompted 98% of respondents who reported making a health behaviour change identified changes for which there is scientific evidence of health benefits (i.e. taking more exercise, eating a healthy diet, stopping smoking or drinking less alcohol).

Of the 135 respondents who had not made a health behaviour change, 86 explained this was because they already did what they considered to be healthy things (like exercising and/or eating healthily and/or not smoking). They were slightly more likely to be female and more likely to be aged 60+. The remaining 49 respondents gave answers which suggested they felt unwilling or unable to make health behaviour changes. For example, some referred to being too busy, too lazy or happy with the way they were, while others described themselves as not interested, lacking will power, stuck in a routine, or not caring enough about their health.

Of the 873 people who had tried to make a change: 69% reported they had succeeded; 17% reported partial success; and 15% reported they hadn't succeeded in making a change.

Table 1 describes which health behaviour changes were most frequently described and which reasons were most often given for making and sustaining a health behaviour change.

The language used to communicate public health messages needs to resonate with members of the public. Some of the more memorable comments from participants are therefore also listed in Tables 1 and 2.

What health behaviour changes were made?
Of those who had made changes the words they used to describe the changes were analysed and then collated under headings which represented the most frequent responses (Table 1).

This indicated that exercising more was the most common health behaviour change, followed by eating a healthier diet or eating less, then stopping or significantly reducing smoking. Cutting down alcohol consumption was cited less often. Some people gave several examples, often a combination of exercise and diet, in which case each example was recorded.

The categories above are summaries. For instance, at one large event the types of exercise mentioned included gym, walking, jogging, fitness, being more active, work out, netball and yoga.

The reasons for making a behaviour change
The responses were analysed and then collated under headings which represented the most frequent responses. The three most common reasons given for making a change were: to be healthier, fitter or feel better; to lose weight; and health problems experienced by themselves or someone close to them or the result of a medical test or medical advice (Table 1).

Sample responses are also included in Table 1, as qualitative evidence, to help more fully understand the type of reasons for behaviour change.

Just over a third of respondents (343 people) were also asked what their highest qualification was. Of this smaller sample, those with higher qualifications were more likely to report taking more exercise.

What helped sustain the change?
746 people reported they had fully or partially maintained the change in behaviour. Their responses were analysed and then collated under headings which represented the most frequent responses (Table 1). The three most common reasons cited as helping sustain the changes were: positive results; will power/discipline/motivation; and knowing it is better for you/good for your health.

The sample comments (Table 2) illustrate the diversity of factors which respondents believed had helped maintain their behaviour change, to complement the quantitative data in Table 1.

Statistical analysis

Principal Component Analysis
A Principal Component Analysis was conducted on the 19 wellbeing items collected to condense and combine the factors. This yielded 9 components, together cumulatively explaining 61.67% of the variance in scores (Tables 7 and 8).

Regressions
A multiple regression model was also employed to help analyse the data. This examined how demographic factors predict the factors extracted from the principal component analysis:

Age was found to significantly predict respondents reporting 'health issues' as a reason for making a health change, as well as a reason for sustaining the health change, with older people more often reporting this as a reason ($p<.001$). This is probably not surprising as the prevalence of illness tends to increase with age.

Stopped or reduced smoking due to expense was significantly predicted by ethnicity and gender. White ($p=.001$) and male ($p=.002$) respondents were more likely to report that they stopped or reduced smoking due to expense than ethnic minority males or females in general (although, among respondents overall, expense was only the third most common reason cite for giving up smoking).

Ethnicity was also found to significantly predict respondents reporting 'live longer' and 'good for health' as a reason for making a health change, with ethnic minority respondents more often reporting these as reasons for making a change to their health behaviour ($p=.008$).

DISCUSSION

It was interesting that the vast majority of people surveyed seemed to know what constitutes healthy behaviour, in particular to take exercise, to eat healthily and to avoid smoking. These were the changes in behaviour most often attempted by the respondents. One possible exception is that less than 10% of those making a health behaviour change had chosen to cut down alcohol consumption. In the light of the 2016 A*lcohol Guidelines Review* (11) it is a concern that reducing alcohol consumption appears to be a low priority for people. With this possible exception the public health challenge is therefore not to provide public health information *per se* but rather how to encourage people to act on what they already know is good for their health – for example through some of the approaches below.

Good health appeared to be valued and acted on, as an end or value in itself, by around 40% of our respondents. This correlated with earlier research into health values by Tapper et al (12), which suggests a positive base to build on, from which to reach out to more of those for whom good health in itself is not yet sufficiently valued.

The variety of responses suggests that when it comes to health behaviour change no one size fits all. However, some responses appear worth pursuing further, to help identify what might encourage health behaviour change. For instance, the idea of specific 'cues to action' is an element of the "Health Belief Model" (13). However, more recent studies have questioned what 'triggers' health behaviour change. For example, receiving a personal risk factor for major diseases based on genetic tests (14) or receiving a cancer diagnosis (15) have been found to result in little health behaviour change. In contrast, in our study, 19% of the respondents who had sought to make a change cited health problems experienced by themselves or someone close to them as the reason, with diabetes sometimes a trigger.

Other potential trigger points in people's lives in the study included: getting married, trying for children, becoming pregnant and having children or grandchildren; divorce; and getting older.

Teachable moments

These trigger points suggest some windows of opportunity for health professionals to provide health advice for patients. This is unlikely to prove a panacea. However, health messages which are personalised and provided by trusted health professionals at points in people's lives when they are more potentially receptive seem likely to have some beneficial effect.

Using trigger points could support the 'make every contact count' agenda for health professionals. It also tallies with a review article in BMC Public Health in 2010 (16), which found that physician advice and individual counselling were two of the four most effective interventions across a range of health behaviours. The influence of family, friends and colleagues was not mentioned as often as might have been expected from a "Normative Beliefs" (17) perspective. However, it was cited often enough to be seen as an influencing factor. For example, a number of respondents who were smokers referred to the influence of others they shared a house with.

Some factors, like environmental cues (18) work at an unconscious level so would be less likely to be mentioned by the respondents in this study. However, our study suggested two possible exceptions, where environmental cues were mentioned: i.e. smoking (where price and the diminishing public spaces for smoking were referred to) and exercise (where the proximity of a gym or the availability of a fitness app were both raised).

Demographic factors also appeared to influence responses. For example, among our respondents: Men were more likely to have reported giving up smoking and reduced alcohol consumption, whereas women were more likely to have reported diet related changes; Positive results appeared more motivating for women, whereas more men than women ascribed their successful behaviour change to will power; Ethnic minority respondents were more likely to have been motivated by a health problem experienced by themselves or someone close to them.

The different gender responses correlate with recent studies suggesting differences in the way health information is accessed and used. (19,20) This reiterates the need to target public health messages more precisely.

With pricing in the news as a result of the proposed soft drinks levy it is interesting to see how this featured in the responses. Expense was mentioned most frequently as a reason by those who had sought to give up smoking, particularly by white males. However, it was still mentioned by only 10% of those who had sought to stop – suggesting that pricing has already achieved most of the behaviour change it is likely to achieve for this group. In comparison 37% said they had sought to stop smoking to become healthier and fitter, 21% because of health issues they or someone close to them were experiencing and 10% cited having children or grandchildren as a reason. A further 17% cited a miscellaneous range of reasons, including sensory factors (such as smell and effect on appearance), just deciding to stop, not liking it any more, and the lack of places to smoke in public.

The most frequently cited reason for sustaining health behaviour change (by 25% of those who had succeeded) was positive results – such as looking better, feeling better, feeling healthier or fitter, enjoying what they were doing (mainly different forms of exercise but also healthy eating) and losing weight. This perhaps links with the idea of internal motivation.

However, we did find one possible issue here. Public health messages ideally need to be simple, clear and consistent, as with the weight loss mantra, exercise more and eat less. However, strategies are needed when the evidence base changes. For instance, it is now increasingly believed that what people eat as well as how much is the most significant factor influencing weight, rather than exercise (6). This matters because our findings suggest: Taking more exercise is the most common type of health behaviour change; Losing weight is one of the reasons; Achieving positive results is one of the main motivators for maintaining behaviour change. This means that exercising to lose weight may prove only partially successful and thus demotivating – whereas we ideally need to encourage exercise for all its proven non weight related health benefits, plus a healthy diet as the best way of controlling weight.

With 20% of respondents citing losing weight as their reason for making a health behaviour change (and with obesity acknowledged to be a significant problem in the UK) it is important that health professionals provide advice likely to achieve the best weight management results.

LIMITATIONS

There are limitations to the study, including a reliance on self-reporting, geographical bias, opportunity sampling and that subconscious motivations may not have been accurately recognised. However, these limitations were taken into account when considering the findings and the approach taken provided useful qualitative data and potentially allowed a 'broad brush' picture to emerge.

CONCLUSIONS

More research is needed, in particular outside the London region, to confirm the results of this pilot study. However, initial indications are that:

Most people know they should eat a healthy diet, get enough exercise and not smoke. With the exception of alcohol, whose health risks may not yet be sufficiently understood and acted upon, the public health challenge is therefore to encourage people to act on what they already know is good for their health.

A significant number of people report having made successful health behaviour changes, in particular to exercise more, eat more healthily and stop smoking. If we seek to learn from their experience: The desire to be healthier and fitter and feel better is motivating for some. It appeared to motivate around a third of those who reported making a successful behaviour change; and already leading a healthy lifestyle was the most commonly cited reason for not making a change. In addition, the most frequently reported reason for sustaining behaviour change was positive results e.g. looking and feeling healthier and fitter (including losing weight).

For those with less intrinsic motivation there appear to be a number of potential trigger points in their lives when they are likely to be particularly open to advice from health professionals – in particular when they are pregnant, when they have children, when they or someone close to them has been diagnosed with an illness, or as they get older. This suggests windows of opportunity to provide health advice and encourage health behaviour change.

Environmental cues may operate at a more subliminal level, which may explain why they were mentioned less often. However, they seem worth pursuing as a number of smokers mentioned factors like price or the difficulty of finding places in public where they could smoke as leading to their decision to quit; and the proximity of a gym or a fitness app on smartphones encouraged a number of people to do more exercise.

Whether public health messages resonate more if they use language ordinary people use to describe their experiences may merit research. The potential for gender-based approaches to health behaviour change may also merit further research.

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Conflict of Interest
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Table 1. Participant Responses to the Questionnaire

	Health behaviour change	**%**	**Reasons for making a change**	**%**	**Factors helping maintain a change**	**%**
Frequently cited factors	Exercise	51%	To be healthier, fitter or feel better	34.5%	Positive result	25%
	Healthier diet/eating less	43.5%	To lose weight	20%	Will power/ motivation	13%
	Stopping smoking	21.5%	A health problem experienced by self or someone close	19%	Knowing it is better for you	12.5%
	Reducing alcohol consumption	8%	Getting older	7%	Partner, family or friend	9%

Examples of language used to explain their health behaviour change

"People used to comment when I was fat."

"Getting married in a few months. I need to fit into my wedding dress"

"A life-threatening illness. It was a wake-up"

"The sight of other people getting fat and ill."

"I've got six grandchildren. I want to be around to bring them up."

"I was going on holiday with a load of skinny girls."

"I don't want to be running after my boy and he's 'Why are you sweaty and having a heart attack, dad."

"I don't ever want to feel that way again."

"My partner was concerned"

"Family illness was a wakeup call."

"My daughter said, 'Dad you stink' (of smoking)".

Table 2 Examples of words used to explain why health behaviour change had been sustained

"Sense of achievement – I've lost 3 ½ stone"
"At first it was quite hard. Once you see the results though it's quite motivating"
"You feel better when you're healthier, innit?"
"Seeing results. Maybe no one else notices but I do"
"I saw the weight come off. I kinda liked it"
"Know it makes me feel better, sleep better, mental health"
"No point in doing it and then stopping"
"Will power"
"You just have to talk to yourself"
"My friends are doing it. I go with them" (gym)
"Because I like it" (yoga, fitness and dance)
"Getting enjoyment from healthy food you cook"
"I don't want to be dependent"
"I want to live to a ripe old age"
"I put the money I saved (from smoking) in a glass jar. At the end of the year it took me on holiday."
"A lot of elderly relatives' illnesses. Self-inflicted, they could have been avoided, like diabetes"
"Have to have targets e.g. going on holiday"
"There's now a good gym near where I work"
"I found it helpful to say, 'I don't smoke' instead of 'I've given up smoking'"
"If you keep it up for six weeks it becomes a habit"
"My friends are doing it. I go with them" (gym)
"If you have someone to do it with it makes it easier"
"NHS App, couch to 5K"