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# Feasibility of a men's health promotion programme in Irish primary care

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## Abstract

**Background** To assess the feasibility of offering health promotion and preventive medicine initiatives in primary care.

**Aims** A pilot study aimed at men in general practice to establish the uptake, acceptability and effectiveness of interventions in health initiatives.

**Methods** One thousand men aged 18-65 were selected at random from five general practices in the Western Health Board area. Practices were randomly allocated to one of four brief interventions: cardiovascular screening, cancer screening, stress management or general lifestyle advice.

**Results** Fifty-five per cent of men responded, with 35.7% actually attending. There were minor but significant short-term changes in health status and behaviours. Participants expressed high levels of satisfaction, but tended to prefer interventions with an explicit clinical component.

**Conclusion** It is at least as feasible to offer health promotion for men in primary care as it is for other demographic groups, but adequate training and resources are required.

## Introduction

In recent years there has been a resurgence of interest in men's health, both male specific conditions and risk factors that are more common in men.<sup>1</sup> Irish policy recommendations include recognising men's health as a specific issue, re-orienting services to take account of men's low knowledge base, promoting men's health, instituting screening, and calls to revise the General Medical Services (GMS) contract to include health promotion and preventive medicine.<sup>2</sup> Before any revisions can take place, the feasibility of health promotion activities for men within the context of primary care in Ireland must be established.

Uptake of health promotion programmes in primary care varies enormously (8.8-78%) mainly due to differences in recruitment methods.<sup>3-6</sup> Highest rates are obtained by written invitations with allocated appointment times, followed by several repeat invitations, reminder letters or telephone calls. Response rates tend to be lowest amongst males, single and younger persons and lower social classes.<sup>3-6</sup> Response rates are lower for smokers, overweight persons, heavy drinkers and people with unhealthy diets and those who were long-term non-attendees at the practice.<sup>6-11</sup>

Most primary care health promotion programmes in Britain and Europe, such as OXCHECK<sup>12</sup> the British Family Heart Study<sup>13</sup> and the Tromso Heart Study<sup>14</sup> have been cardiovascular system oriented and have achieved modest success in reducing risk factors for cardiovascular disease.

The two-tier nature of the Irish healthcare system makes it inadvisable to make inferences based on other primary care programmes. Two Irish studies have shown that attendance rates at health promotion programmes are generally lower than elsewhere. Post-menopausal women invited to health screening had a 33% attendance rate,<sup>15</sup> while there was a 9% attendance rate for 8-15 year olds to a lifestyle cardiovascular programme.<sup>16</sup> The aim of this pilot study was to establish the feasibility of

a health promotion programme in an Irish primary care setting focusing on uptake, effectiveness and acceptability for men aged 18-65. Specific objectives were to discover the likelihood of attendance and the type of programme that would be of most interest.

## Methods

A study involving a pilot intervention programme in five general practices from the Western Health Board area was undertaken. A total of 1,000 men aged 18-65 (200 in each practice) were selected at random from the age-sex register of each practice. Men with chronic illness and those who had attended the practice within the previous two years were not eligible. All practices had similar proportions of GMS and private patients but differed in location and resources.

Each eligible participant was invited by letter to participate in a men's health study. They were assured that participation was voluntary and confidential. Practices were randomly allocated to one of four types of intervention: a cardiovascular or cancer risk assessment, stress management or a general lifestyle advice programme. An intentional feature of the study was the absence of a control group. The inclusion of such a group would give rise to the high probability of a testing effect with the baseline instrument.<sup>17</sup>

Invitees were requested to contact the practice within two weeks to make an appointment and/or to return a short questionnaire seeking demographic information and details on smoking, exercise, drinking and stress. If there was no contact, non-respondents were telephoned to remind them to return the questionnaire.

The men who attended completed a baseline assessment of their current health behaviours. This was a modified version of the Survey of Lifestyles and Nutrition<sup>18</sup> with sections pertaining to demographic information, exercise, physical activity, tobacco and alcohol consumption, diet and eating habits. The General Health Questionnaire (GHQ12) — a measure of mental health — was completed by the client in the waiting room prior to the consultation.

The interventions were lifestyle health education, based on diet,



exercise, smoking and alcohol given by practice nurse (two practices, one rural, one urban); health education on stress management, including a relaxation tape, given by the GP; measurement of blood pressure, waist-hip ratio and body mass index (BMI) and tailored advice from the GP on cardiovascular disease prevention; and a short questionnaire on knowledge of potential cancer symptoms with tailored advice from the GP.

Three to four months after the intervention, those who attended were invited to return to the surgery for a follow-up visit. This was a replication of the initial consultation, to establish the acceptability of the intervention and permit comparison with baseline findings. Participants were also asked to take home and fill in a satisfaction survey based on that of Nupponen,<sup>19</sup> containing closed and open-ended questions which would be posted directly back to the researchers. Men who did not return for the second visit were also sent the satisfaction survey.

Answers to the open questions were interpreted using content analysis. Comparisons between intervention activities were planned in order to assess acceptability. Telephone interviews were carried out with practice staff involved in the project as process evaluation. Statistical analysis was undertaken using SPSS for Windows. Categorical comparisons were made by means of chi square or McNemar tests, interval data were analysed using paired or independent sample t-tests as appropriate.

## Results

### Participants

Of the 1,000 letters sent out, 19 were returned 'not at this address', giving a valid sample of 981. Over half returned the questionnaire. Over one-third of those invited agreed to attend and almost two-thirds of attendees returned for the second visit. Of those originally invited 19.5% followed through to a second visit. Response rates are summarised in Table 1. Practices with an appointment system tended to have the highest response rates. A high proportion of participants made repeat appointments for a full medical on their own initiative.

There was no age difference between responders and non-responders. When those who agreed to participate were compared to those who declined according to demographic characteristics and lifestyle, participants were more likely to be from social class 2-3 ( $p<0.01$ ). Non-participants had experienced stress significantly less often compared to participants (95% CI, 0.64-1.02, [see Table 2]). There were no differences between those who returned for follow-up to those who did not.

### Interventions

The lifestyle practices provided lifestyle-related health education, based on the topics of diet, exercise, smoking and alcohol using leaflets produced by the Health Promotion Unit. There was an increase in the numbers who regularly ate porridge ( $p<0.01$ , 95% CI 0.42-6.69), and a gain in weight and BMI ( $p<0.01$ , 95% CI -0.568-8.66). There was an increase in those who had heard of testicular self-examination, from 54.8% to 75.3% ( $p<0.01$ ). An improvement in mean GHQ scores ( $p<0.01$ , 95% CI 0.69-2.49) was noted, as was a decrease in the number of urban smokers, from 28% to 15.4% ( $p<0.01$ ).

The stress management intervention consisted of health education and a relaxation tape for home use. A follow-up questionnaire was only completed by one of the men attending the second visit. The authors assume that it was not useful and there were no changes evident in this group.

The cardiovascular intervention questioned men's beliefs about blood pressure and cholesterol checks and included simple physical measurements. There were minimal changes in

beliefs and no significant change in mean systolic or diastolic blood pressure over the course of the two visits.

In the practice that performed cancer intervention there were significant improvements in knowledge and awareness relating to testicular self-examination from 63.2% to 86.8% ( $p<0.01$ ) and prostate cancer ( $p<0.01$ , 95% CI 0.16-0.64). There were no changes in behavioural intention as regards responding to several cancer-related symptoms (see Table 3).

### Patient satisfaction

A total of 151 participants (79%) who had attended both visits returned the patient satisfaction questionnaire, but only 14 (11.9%) of those who had attended only one visit did so. Levels of satisfaction with aspects of the intervention are summarised in Table 4. Men were likely to be pleased with the intervention, feel that it was easy to understand and that matters personally important were discussed. Less than half of respondents agreed with the statement that 'advice sessions are more beneficial than tests and measurement'.

There were some differences in aspects of satisfaction according to intervention (at the  $p<0.05$  level). Those attending the cancer intervention were very satisfied and most likely to agree that the visit was easy to understand. Those who attended the cardiovascular intervention were most likely to agree that they got information that would be difficult to obtain otherwise. They were significantly less likely to be pleased with the visit, to agree that the intervention included enough tests (although it was the only intervention to include tests) to agree that the visit was easy to understand or that advice is more beneficial than tests. Those who attended the lifestyle intervention, which was nurse delivered, were least likely to agree that a GP is better suited to this type of visit than a practice nurse or to agree that the information obtained would have been difficult to obtain otherwise. Those who attended the stress intervention were quite satisfied but less so regarding the number of tests and merits of advice compared to tests.

When asked what the best thing about the visit was, five categories emerged from 152 open-ended comments. They were an increased knowledge of health-related issues, the health professionals favourable personal communication style, an increased awareness of health, the opportunity of talking to a health professional and the chance to address issues pertaining to one's own health.

Participants were also asked what they felt was the worst thing about the project. Responses to this question were less forthcoming, most citing the questionnaire: e.g. 'filling out all the forms', 'too many questions'. Also mentioned was the amount of time involved in coming to the surgery, disappointment with the 'lack of medical tests', feeling that the intervention 'didn't go far enough' or was of no benefit to them personally.

Only 14 men who did not attend the second visit did return the satisfaction questionnaire. Most decided not to re-attend because they felt that they did not have time or because they felt the first visit covered everything. Only one respondent stated that it was because he did not feel the first visit was helpful.

### Opinions of practice staff

Practice staff were asked about their perceptions of the Men's Health Project, with the view of making recommendations for a larger scale project. Overall, practices were positive about the project, stating that such an initiative was feasible with adequate personnel and resources, such as a practice nurse and



**Table 1. Overall participation rates of men aged 18–65 in five general practices**

Intervention	Invited	Total responses (%)	Agreed to attend (%)	Attended 1st visit (%)	Attended 2nd visit (%)
Cancer	200	110 (56)	80 (41)	60 (30.8)	40 (66.6)
Cardiovascular	200	147 (75)	57 (29)	57 (29.1)	11 (19.3)
Stress	200	52 (26)	28 (14)	24 (12)	12 (50)
Lifestyle (rural)	200	115 (59.3)	81 (41.8)	79 (40.7)	74 (93.7)
Lifestyle (urban)	200	116 (59.2)	104 (53.1)	89 (45.4)	54 (60.7)
Total	1,000	540 (55)	350 (35.7)	309 (31.5)	191 (61.8)

**Table 2. Demographic and lifestyle differences of target populations according to levels of participation**

Participants versus non-participants			
Social class - higher	47% vs 32%	c2=13.76, df=2 **	
Stress in last six months	M=2.9 vs 2.0	t=8.51, df=456**	
95% CI (0.64-1.02)			
**=Significant at 0.01 level.			

**Table 3. Lifestyle-related changes in awareness and behaviours at baseline and follow-up**

Lifestyle intervention	Pre-test	Post-test	T value	p	95% CI
Regularly eats porridge	Mean=1.36	Mean=1.61	-2.748	0.008	-0.42-6.669
BMI	Mean=25.83	Mean=26.16	-2.712	0.008	-0.5683-8.66
Awareness of testicular self-examination	54.8%	75.3%	-0.001		
General health questionnaire score	Mean=10.38	Mean=8.79	3.532	0.001	0.69-2.49
Smoking status	28%	15.4%	-	0.008	
<b>Cancer intervention</b>					
Knowledge of TSE	63.2%	86.8%		0.002	
Knowledge of prostate cancer in the over 50s	Mean=1.78	Mean=1.38	3.399	0.002	0.16-0.64

**Table 4. Patient satisfaction with four men's health promotion interventions**

% Agreed		Cancer n=44	CVS N=8	Stress N=11	Lifestyle* N=105	Mean (rank 1-5) (F value)	Sig. of difference	95% CI
Visit was easy to understand	97	98	75	100	98	4.51	F=7.337, p<0.05	4.42-4.59
GP better suited than nurse	35	87	25	82	6	3.06	F=62.57, p<0.05	2.88-3.24
Matters important to me discussed	90	91	100	91	89	4.19	ns	4.09-4.29
Enough lab. tests	61	38	0	50	8	2.42	F=11.281, p<0.05	2.22-2.61
Information difficult to obtain otherwise	61	76	100	73	52	3.57	F=3.971, p<0.05	3.42-3.72
Advice better than tests	48	56	12	55	46	3.39	F=3.424, p<0.05	3.23-3.54
Pleased with visit	92	100	37	100	93	4.39	F=10.096, p<0.05	4.28-4.49

\*Lifestyles practices combined for this analysis.

secretarial staff. An appointment system was an essential requirement, as was willingness to schedule appointments out of hours. Staff found administration to be a burden, even with support staff. The consultations themselves did not impinge greatly on the workload, provided appointments were adequately spaced.

The strengths of the project were seen to be the raising of awareness of men's health and lifestyle issues on the part of both service providers and the men themselves.

## Discussion

This pilot project assessed the feasibility of a primary care programme in an area where no such programme currently

exists. It examined four different health promotion programme permutations and included a random allocation to each intervention.

Attendance rates are comparable with studies of Irish women and children in primary care<sup>15,16</sup> suggesting that men are no less likely to attend a health promotion intervention in primary care. Attendance rates are considerably lower than those achieved in the UK and European studies<sup>9,20</sup> partially because of the lack of an appointment system in some practices.<sup>21</sup>

Lifestyle and cancer interventions were most successful in attracting men to return visits. The open-ended responses in the satisfaction questionnaire, however, expressed disappointment with the limited nature and repetition of the



interventions. Differences in uptake were likely due to methodological inconsistencies between practices, or individual differences between practices, which were not standardised — this being a pilot study. Practices differed in their interpretation and compliance with the protocol, especially randomisation and reminders after the initial invitation. There was reluctance by some to send reminders as this could put pressure on patients. Future studies should randomise individuals, rather than practices to interventions.

The demographic characteristics of participants followed a similar pattern to European studies, and to Tudor-Hart's inverse care law.<sup>14</sup> Participants were likely to be married, from higher social classes and well educated. They also tended to have a relatively healthy lifestyle, and as per programme design, were registered with a GP. These are the people easiest to reach and least in need of health promotion.

Satisfaction rates amongst participants were high. Men, however, are not as satisfied with 'advice only' sessions. The British Family Heart study<sup>20</sup> found that mass cholesterol testing was not cost-effective in reducing cardiovascular disease, but may help induce men to take part in health promotion programmes. Satisfaction rates with both nurses and GPs were high. Recipients of nurse provided intervention did not feel the need to meet with a doctor confirming a previous finding of satisfaction with nurse-led primary care programmes.<sup>16</sup>

The second follow-up visit served as short-term impact evaluation. The short-term impact of the interventions was modest, but beneficial and consistent with the content of the intervention. While the reported changes may not be of great magnitude, they do show a definite effect resulting from a brief, health education-type intervention in primary care. Longer-term interventions and evaluation would be necessary in assessing the behavioural impact over a period of time.

For GPs to be proactive in men's health, a workload and resource review would be needed. Many rural practices have no support staff. A primary care-based health promotion programme for men would require a huge input of resources for a modest return. It may be more realistic to train GPs and practice nurses to incorporate lifestyle education and health promotion into consultations opportunistically. The design used in this study should be compared with such an approach.

In conclusion, uptake rates are modest, if comparable with programmes directed at women. For participants, such programmes can be both acceptable and have some modest, short-term effects. Those who attend are happy to see a nurse or a doctor. They prefer medical tests to stress management interventions. Socially disadvantaged men are less likely to attend and should be targeted in other settings, such as the workplace.

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