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Practice & Innovation

Australian Journal of Primary Health, 2009, **15**, 173–179

Consulting consumers to develop marketing and recruitment strategies for a diabetes prevention program

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Abstract. Recruitment of participants to health education programs is a challenge often encountered in community health care settings. This paper outlines the process used to identify what strategies, approaches and messages raise community awareness of risk factors for type 2 diabetes and elicit action on the part of individuals to address risk factors. Consumer focus groups were conducted to explore people's concerns, knowledge and beliefs around prevention of diabetes and with an aim to identify marketing messages and strategies for engaging participants in a diabetes prevention program. Findings from the focus groups were used to develop marketing messages that were then tested in further consumer consultations. They identified commonalities and differences between cultural groups. The key common point in relation to the marketing messages was the need to emphasise the consequences of type 2 diabetes and the individual relevance of risk factors. The importance of receiving information from trusted health professionals and the need to personalise messages of risk and encourage individual action was also highlighted in the research and incorporated into marketing and recruitment strategies.

Additional keywords: consumer consultation.

Introduction

Almost one in four Australians, 25 years and over, has either diabetes or a condition of impaired glucose tolerance, or pre-diabetes – the immediate precursor to type 2 diabetes. For every known case of diabetes there is one undiagnosed case, and three cases of pre-diabetes (Diabetes Australia 2001). Type 2 diabetes is strongly associated with lifestyle-related risk factors that are modifiable (Colagiuri *et al.* 1998) and there is strong evidence to suggest that the development of type 2 diabetes and the progression of impaired glucose tolerance to type 2 diabetes can be prevented (Pan *et al.* 1997; Tuomilehto *et al.* 2001; Knowler *et al.* 2002).

On the basis of this evidence, the Victorian Government '*Go for your life*' initiative funded the 'Diabetes Prevention – A *Go for your life*' Program. This program incorporated a 6-month Healthy Living Course based on successful programs conducted in international studies (Pan *et al.* 1997; Tuomilehto *et al.* 2001; Knowler *et al.* 2002). Three pilot sites, two in metropolitan Melbourne and one in regional Victoria, were chosen to trial the program.

Several groups are known to be at higher risk of diabetes. These include Aboriginal and Torres Strait Islanders and those of Pacific Island, Indian subcontinent or Chinese cultural background. Each of the pilot sites was required to identify and encourage participation of at least one high-risk group with significant numbers living in their community. The three groups identified by the project were Aboriginal and Torres Strait Islanders, Chinese and Sri Lankan communities.

The three sites recognised that, for the program to be successful, their two greatest challenges would be:

- Identifying those with risk factors for diabetes in their communities
- Recruiting at-risk individuals, often without active symptoms, to attend the Diabetes Prevention – A *Go for your life* Program.

Hence, the three groups combined resources to explore the barriers and enablers for recruitment to a community-based diabetes prevention program. A research consultant was contracted to conduct the research.

Background

Perception of risk

Two common key factors influencing people's attitudes to risk are trust in the information given about the risk, and

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10.1071/PY08062 1448-7527/09/020173

perceptions of how severe, controllable or personally relevant the risk is (Bennett 1997).

Trust is determined by the credibility of the person or organisation providing the information, and the manner in which the information is presented; that is, whether it is provided in an open manner with the supporting evidence outlined. A high level of trust in the information is required to raise an individual's awareness of and concern regarding risk.

Risk may be perceived as being less acceptable or more worrying if it is not within the individual's control. People tend to overestimate risk related to communicable disease where they perceive themselves as having less control, and underestimate the risk related to chronic disease (Stanton 2004).

An individual's perception of and response to risk may also be influenced by their belief in how much control they have of their health, their view of benefits *v.* costs of attending to a health risk message, and what other risks or priorities they may be facing at the time (Bennett 1997).

Community knowledge and perceptions of diabetes and pre-diabetes/impaired glucose tolerance

No studies were found specifically exploring community perceptions of impaired glucose tolerance or pre-diabetes but community perceptions regarding diabetes have been reported.

Research commissioned by Diabetes Australia in 1998 (Carter *et al.* 2002) suggested that:

- Diabetes is not regarded as an issue of great public concern compared with other diseases.
- The public thinks it knows more about diabetes than it actually does.
- The seriousness of diabetes is underestimated because management appears straightforward.
- The perceived personal risk of contracting diabetes is low.

Two other international studies reporting on community perception in relation to risk of developing diabetes supported these findings (Walker *et al.* 2003; Arcury *et al.* 2005). Walker and colleagues found that even in the presence of a high level of knowledge of risk factors there was still a tendency for individuals to underestimate their risk of developing diabetes.

Raising awareness and promoting action

In 2002, Diabetes Australia researched community perceptions of diabetes and risk of developing diabetes in order to develop advertisement concepts for an awareness raising campaign (Carter *et al.* 2003). The research confirmed findings from the 1998 Diabetes Australia research regarding knowledge and risk perception for diabetes. The other key finding was that information on the widespread prevalence and severe consequences of diabetes was not commonly known and that this information effectively gained participants' attention and raised the personal relevance of the disease to them. The resulting recommendation was that, in order to gain the attention of the target audience, opening statements for media advertisements could be about the prevalence of diabetes, but the major emphasis should be on the consequences.

A comprehensive multimedia diabetes awareness campaign utilising the above findings was implemented in Western Australia (Carter *et al.* 2003). Pre- and post-campaign surveys ($n = 505$) found that the campaign successfully raised awareness of diabetes and knowledge of risk factors and consequences. Self-reported risk perception and personal concern regarding developing diabetes also increased significantly. Respondents were most likely to recall TV advertisements; recall of newspaper advertisements was reasonable but there was very poor recall of posters, public talks and radio advertisements.

General practitioner (GP) recommendation is frequently identified as a key facilitating factor in increasing personal relevance and perceived credibility of a health education program (Murphy 2002; Carter *et al.* 2003). Both the Quit and Active script initiatives have used the influence of GP to promote the programs to their patients, but the effectiveness of GP in promoting lifestyle change is variable (Garrard *et al.* 2004).

The literature highlights the need to understand community perception of risk factors, messages that may influence their perception of risk, who they would perceive as a trusted source and how messages regarding risk and prevention programs could be effectively delivered.

Consumer consultation process

Consumer research to identify strategies for reaching and engaging people at risk of diabetes was conducted in two phases. Phase one – the exploratory phase – involved a series of focus groups to explore community perceptions of diabetes risk, motivating factors to take action to reduce risk, how to get messages to the community, and types of programs that would be appealing. In phase two, concept marketing messages developed from the findings of phase one were tested with consumers to determine appropriate content for program promotional material.

Phase one: focus groups

Four focus groups were conducted as described in Table 1. Although the program was intended for the whole population, each of the three pilot sites identified a specific community group in their catchment known to be at increased risk of diabetes. Focus groups were held with each of these communities. One site also held a focus group with a general English-speaking community group.

Research questions for the focus groups were developed through consultation with project staff and consideration of issues identified in the literature.

The research objectives for the focus groups were to:

Table 1. Focus groups

Focus group location	Cultural group	No. participants	Age range (years)
Inner East PCP (Box Hill)	General population	9 (5 female)	46–65
Inner East PCP (Box Hill)	Chinese Cantonese speaking	15 (11 female)	35–65+
South East PCP (Doveton)	Sri Lankan	5 (4 female)	35–65
Goulburn Valley (Shepparton)	Aboriginal	12 (11 female)	14–65

- Identify the relevant issues and concerns people have in relation to preventing diabetes.
- Identify, people's beliefs about how diabetes can be prevented.
- Identify consumers' perceptions of types of services or programs they believe would meet their needs.
- Identify appropriate strategies for engaging consumers in the diabetes prevention project.

Participants in the focus groups were recruited via flyers in local services or letterbox drops, or through promotion to specific community activity or social groups. Participants were given either a cash payment or a gift voucher for their involvement in the project. The recruitment flyers asked for people who identified themselves as being at 'increased risk' for diabetes according to the risk factors described in Table 2. All groups consisted of more women than men (see Table 1).

The focus groups were of 1.5 h duration and all, except the Chinese group, were facilitated in English by an experienced group facilitator. A detailed discussion protocol was followed based on the specific information objectives outlined above. Open-ended exploratory questions were used, with participants encouraged to share views rather than attempt to reach group consensus on topics. A second researcher took notes and the facilitator made field notes of key themes following each focus group.

The Chinese focus group was held in Cantonese and conducted by a Cantonese-speaking diabetes educator using the same discussion protocol. A qualified interpreter took notes for this group; the notes were provided to the researchers for analysis.

The research notes were analysed by the facilitator; key themes that were consistent across and within groups were identified, and these were checked with the second researcher.

Table 2. Risk factors for type 2 diabetes

I am over 55 years of age
I am over 45 years of age and I am overweight
I am over 45 years of age and an immediate family member has type 2 diabetes
I am over 45 years of age and have high blood pressure
I am over 35 years of age and from an Aboriginal, Torres Strait Islander, Pacific Island, Indian subcontinent or Chinese cultural background
I have heart disease or have had a heart attack
I had diabetes when I was pregnant (gestational diabetes)
I have impaired fasting glucose or impaired glucose tolerance
I have polycystic ovarian syndrome and I am overweight

Focus group findings

Several of the main themes emerging from the focus groups were consistent with themes emerging from the literature.

Most people in the focus groups believed diabetes to be preventable but highlighted that getting people to take action to prevent diabetes would be a significant challenge. Although all groups had a general awareness that diet and exercise were key factors for prevention, their specific knowledge of dietary guidelines was limited.

Another common theme across all focus groups was that people would be more likely to act on information delivered personally or in a letter from a trusted source and less likely to respond to general information brochures. The GP was identified as a trusted source by all groups, but the Aboriginal and Sri Lankan groups also identified community or cultural leaders as trusted sources of information and key pathways for marketing and recruitment.

Cultural differences were not significant between English and Chinese focus groups. However, findings from the Aboriginal and Sri Lankan groups highlighted two significant cultural differences for consideration. Seeking preventative action or screening tests may not be a cultural norm for Aboriginal and Sri Lankan communities. There also appeared to be less belief in an individual's ability to influence the onset of diabetes in these groups. The need for a focus on prevention for the whole community was strongly expressed. The Aboriginal community indicated that a program that excluded members of the community (i.e. only allowed those with diagnosed impaired glucose tolerance or impaired fasting glucose to attend) was not likely to be acceptable to the community.

Although there was some support for a broad marketing campaign utilising TV and newspaper advertisements, it was identified that posters and flyers would have limited impact (unless presented by a trusted source in a culturally appropriate context). Word of mouth was also acknowledged as an important factor in a recruitment campaign, particularly in smaller communities.

Findings that were consistent across the four focus groups and the areas that clearly differed across the groups are summarised in Table 3.

It should be acknowledged that only one focus group per community was conducted. Although many of the findings were consistent with information presented in the literature, caution should be used in generalising the findings to the specific cultural groups. The limited number of men in the

Table 3. Findings of focus groups indicating commonalities and differences in beliefs and responses

Area of discussion	General group	Chinese (Cantonese)	Sri Lankan	Aboriginal
Participants' beliefs about why they were at increased risk for diabetes	Common to all groups: family history and age			
	Cultural background	Not sure why they were at increased risk – attending focus group to find out	Cultural background	Cultural background
Feelings towards increased risk of developing diabetes	Worry and concern; desire to try and prevent it	The question elicited beliefs about causes for increased risk, rather than feelings	Worry and concern; desire to try and prevent it	Preferred not to talk about it
Understanding of increased risk	Felt they were unlikely to get diabetes because they follow a healthy lifestyle	Many didn't know if they were at increased risk, or weren't sure how they could tell if they were at increased risk	Most felt it was likely they would get diabetes if they weren't careful	Some thought they would definitely get diabetes, others indicated they weren't sure if they were likely to get diabetes
	Changes in lifestyle in particular diet and physical activity seen as the key factors leading to increased risk of diabetes			
		High-sugar foods identified as a factor		
			Stress thought to be a contributing factor	
Prevention of diabetes	Most indicated they thought diabetes could be prevented; dietary changes and exercise were the key factors identified by all groups as important in prevention of diabetes			
		Regular check ups with your doctor	Education for the whole community important in the prevention of diabetes	
Raising awareness of increased risk	Knew about risk factors from a variety of sources including family, friends and information brochures/TV; most indicated health professionals had not discussed the risks with them	Most indicated no one had discussed risk factors with them; those that were aware of the risk factors did not indicate how they knew about them	Knew they were at increased risk of developing diabetes mostly from their doctor or other health professionals	Knew of increased risk through knowing someone with diabetes or person to person communication within the community (word of mouth); most indicated that they could not recall their doctor discussing risk of getting diabetes with them
Usefulness of risk factor checklist from Diabetes Australia in raising awareness	Indicated checklist would be a useful resource that would help people clarify if they were at risk and may dispel inaccuracies about diabetes that exist in the community		Indicated checklist would not be effective in their communities for the following reasons: the pamphlet used terms and language many people would not understand; don't need an extensive list of risks, just need to mention statistics in our community and family history; needs to be more inclusive, aimed at everyone in the community; needs a greater focus on prevention	
	All groups felt 'Don't ignore diabetes' was a good phrase to use in awareness-raising resources			
Communicating increased risk	General practice identified as the most logical place to promote risk factors for diabetes and people are likely to take notice of the message if it was delivered by the general practitioner either in person or in a letter			
	Information brochures aiming to get directly to people at risk		People in their communities may be reluctant to seek preventative care, may not go to the doctor for screening-type tests and may only go when they become really sick	
			Whole of community approaches needed based on personal contact delivered by the community in community-specific settings	
The Lifestyle Program (the proposed lifestyle program was briefly described to the group and participants were asked if they would attend such a program)	Yes would attend the program and thought others in the community would also attend; reasons for attending differed between the two groups: to gain more information and try and prevent diabetes (Chinese), for extra support especially with lifestyle factors, being part of a group (general)		Sri Lankans would not attend a lifestyle program unless it was 'compulsory' or the general practitioner recommended or referred them	Program would not work; the main reason given was that it needs to target the whole community; people would not come if others were excluded
Promoting the Lifestyle Program	Suggested use of flyers, posters, newspapers, general practitioners, clubs and community-specific organisations		A brochure that explained why people would need to attend such a program and the reasons for doing things would be needed; the program would need to be promoted via specific community networks and held specifically for Sri Lankan communities, in community centres they currently attend	Fear and scare messages were needed to get people to sit up and take notice and messages needed to highlight to the young 'you will get old and get diabetes'; different messages may be needed to target different groups in the community such as young women and men

focus groups also places limitations on how indicative these findings are of male perspectives.

Phase two: development of key messages for recruitment and marketing materials

Phase two involved developing several concept messages that could be used to raise awareness of diabetes risk and provide information on the Healthy Living Course. The concept messages were developed on the basis of information that needed to be communicated along with findings from the literature and findings that were common to all groups in the focus group discussions.

Although findings from the focus groups were used to develop multiple strategies targeted to different cultural groups within the community, marketing materials needed to be appropriate for use within a range of the strategies and for the whole population. Subsequent to this, and due to resource limitations, the participants contributing to the concept testing stage were sourced from a convenience sample of groups with which the pilot sites had immediate access. The concept messages were not tested with the culturally specific groups involved in the first phase of consumer consultation and further testing of the messages with these groups would be needed to determine their appropriateness for each cultural context.

Four versions of an awareness-raising flyer were developed providing different combinations of messages to communicate prevalence and consequences of diabetes and preventative action. Four alternative calls to action, aims and content messages for a program information brochure were also presented.

The concept messages were presented to six consumer groups through opportunistic targeting of groups who had pre-arranged meetings. These consisted of three groups of community health clients, a community health staff group, staff at a TAFE college, and one other community group – a total of 77 participants.

Participants in the groups were asked to rank the messages in each of the areas, with 1 being the message they would be most likely to take notice of or most likely to be interested in and 4 being the least likely. Participants were then given the opportunity to provide general feedback.

Concept testing results

In the concept testing process, participants identified the most important messages as being:

- Risk factors
- Widespread nature of the condition
- Preventative benefit of lifestyle changes.

The need to keep the information concise was frequently mentioned, as was the suggestion of using a slogan of some type.

For an opening statement or slogan, the clear recommendation from the concept testing was to ask a personalised question such as: 'Are you at risk?' to gain people's attention, then to immediately follow this with messages of serious consequences of diabetes and information on identifying risk. Participants consistently reported that the information on risk factors had more personal meaning to them when presented as statements in the first person rather than as a list of risk factors: 'I am over 45 years of age and overweight' or 'I have heart disease'.

Once attention was gained and risk awareness raised, participants reported that messages of hope and prevention were effective in engaging them, particularly where the message emphasised personal control and self-efficacy. The highest-rating message for program aim was one that emphasised increasing enjoyment of life rather than a more impersonal or clinical message regarding improvement of health. When talking about the content of the program, participants wanted to hear most about the specific practicalities of what they would get out of the program; learning what to eat and how to cook more healthily. Broader content statements had less individual relevance.

The concept testing again identified that encouraging discussion with a GP was a recommendation that people would be likely to follow up, but that they would also contact a local community health centre if given a contact name as well as a phone number.

Despite the variable background and ages of the groups, ranking for each of the messages was similar across all groups. For each of the information brochure concepts tested there was one message that was clearly favoured over the other three, when scores across the groups were aggregated. This information, summarised in Appendix 1, was used to determine the content of the promotional material for the diabetes prevention program.

Conclusions

Community knowledge of diabetes is limited, and knowledge of pre-diabetes is even lower. Diabetes is not perceived as being as serious as other health conditions and personal perceptions of risk for developing diabetes are likely to be underestimated.

This provides a significant challenge to health care providers aiming to raise community awareness of individual risk of developing diabetes and to recruit people into diabetes prevention programs.

The role of general practice in diabetes screening, raising awareness and promoting a lifestyle program was consistently identified as being the most effective means of marketing and recruiting for a diabetes prevention program. Consumers reported they would be more likely to act on information delivered personally or in a letter from a trusted source and less likely to respond to general information brochures. The GP was identified as a trusted source by all groups. Work towards developing strategies that can support effective collaboration and cooperative care delivery between general practice and other primary care settings, particularly in supporting identification of those at risk, is essential to the success of these programs.

Broad media campaigns (particularly television) that provide information about the prevalence and consequence of diabetes are likely to increase awareness of risk and individual perceptions of risk. However, motivating individuals to attend a diabetes prevention program and change lifestyle behaviours requires personalising of the risk message by a trusted health professional. Messages that suggest people contact a general advice line for further information are not likely to have a high uptake.

Understanding barriers and enablers to attending lifestyle programs requires consultation and dialogue with the target audience. Involvement of the community in development, promotion and delivery of programs – particularly for culturally diverse groups – may also improve participation. Different groups within the community will require different strategies to best engage them in a lifestyle program. For example, seeking preventative action or screening tests may not be a cultural norm for Aboriginal and Sri Lankan communities and strategies to overcome this barrier need to be addressed in awareness and recruitment strategies. The need for a focus on prevention for the whole community was also strongly expressed by these two groups, suggesting that an intervention focusing on individuals with pre-diabetes may not be consistent with cultural beliefs about community programs.

Findings from the consumer consultation process provide valuable lessons for marketing and delivery of a diabetes prevention program. Many of the findings may also have relevance to other health education programs within a community-based primary care setting. Although caution is needed in generalising results from small sample sizes, and further consultation with larger consumer numbers and other cultural groups would be beneficial, this process has highlighted the value of consumer consultation in developing marketing strategies and materials.

Acknowledgements

The authors gratefully acknowledge the Public Health Branch of the Department of Human Services, Victoria in funding of the Diabetes Prevention – A *Go for your life* Program, and the Primary Care Partnerships of the three pilot sites (Inner East, Goulburn Valley and Greater Dandenong) in supporting this research into marketing and recruitment for diabetes prevention.

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Appendix 1. Information brochure messages

Front page – call to action heading – highest rating message

Are you at risk of developing diabetes?

Diabetes is a serious health condition. There is no cure. If left untreated it can cause heart attack, stroke, kidney failure, blindness, amputation and erectile dysfunction.

This program is designed to help you prevent diabetes.

Program aim – highest rating message

The program aims to help you achieve a balance between a healthy lifestyle and your personal enjoyment. The program will help you set and achieve goals to:

- Prevent diabetes
- Relax and enjoy life

Program content – highest rating message

This program will include information about preventing diabetes such as:

- What to eat
- How to eat less fat and more fibre
- How to cook more healthily
- Exercise