

## Using Health Risk Assessments to Target and Tailor: An Innovative Social Marketing Program in Aged Care Facilities

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## Introduction

The number of Australians over the age of 65 years is expected to double by 2021. Many older Australians suffer from one or more chronic diseases – including cancer, coronary heart disease, respiratory diseases (AIHW, 2009) resulting in increased morbidity and mortality, lower quality of life and a higher need for health care (Hickey and Stilwell, 1991). There is increasing evidence that the adoption of healthy lifestyles can have significant benefits even into older age (Haveman-Nies et al, 2002). This project utilized a social marketing framework to support aged residents of retirement homes to adopt healthy lifestyle behaviours to improve their health.

Social marketing is a consumer oriented approach to behaviour change which has as one of its core principles the need for a consumer orientation; and conceptualises the core product as being the benefits of the desired behaviour (Kotler and Lee 2011; Donovan and Henley, 2010). Effective social marketing interventions are underpinned by behavioural theories. The behavioural theory underpinning this intervention was the Health Belief Model (HBM), which posits that the likelihood of a person engaging in a health-related behaviour is a function of their perceptions of: the severity of a potential illness, their susceptibility to that illness, benefits of taking a preventive action, and barriers to taking that action (Janz, Champion, and Strecher, 2002). Tailoring messages to individuals' health risks addresses the key elements of the HBM and the evidence that an intervention should appeal to individuals' self-interest to be effective (Thorogood and Coombes, 2004). Use of behavioural theory (HBM) and an evidence based tool [Health Risk Assessment (HRA)] to identify segments within the target audience and then tailor health messages for those segments also demonstrates an innovative approach consistent with social marketing's principle of consumer orientation and concept of exchange. This approach makes a theoretical contribution to social marketing by demonstrating that segmenting an audience on the basis of demographic factors (age and place of residence) and specific health risk factors (HRA) has the potential to increase the effectiveness of social marketing interventions.

## Method

An intervention study was conducted within self-care communities in the Illawarra, using an experimental design in which communities received one of two interventions: a tailored educational program based on individual health risks (intervention); or generic information/education program (comparison). *Individual Assessment* - Envelopes containing participant information sheets, consent forms, a Health Risk Assessment (HRA) were posted in resident letterboxes at three retirement villages (n=226). The HRA assesses current health status, such as disease history, sleep and pain; and indicative health behaviours that are relevant to the management of chronic disease, such as diet, physical activity, sun protection, smoking and alcohol use. All residents in the three communities were provided with feedback regarding their individual health risks (HRA results) and priority areas for action.

Residents were then asked to prioritise an area of action and set a goal for the three month intervention period. Residents in the 'intervention' group were provided with 'Individualised Health Packs'. Residents in the comparison community were provided with brochures independent of their health risk profile. *Message Development* - Individualised resident 'Health Packs' were developed to provide intervention residents with evidence based health information specific to their individual health risk profile (as determined by the HRA).

Health brochures were developed for seven priority health areas: hypertension; diet; physical activity; stress and anxiety; screening and preventive health behaviours; and reducing the risk of dementia. The principles of Keller and Lehamn (2008) and Rice and Valida (1991) were followed to ensure credibility and tailoring to the health needs of the target audience. This included: providing information specific to areas identified through the HRA met the tailoring criteria; inclusion of the collaborating organisations' logos provided credibility to the documents (Keller & Lehamn, 2008); clearly defining educational objectives relating to specific behaviour or outcomes; each brochure was designed to provide information and encourage goal-setting; materials distributed with instruction for use; brochures were distributed as part of a pack with supportive documents and instructions for use; materials related to health service delivery: this was achieved by providing community specific information and contact details were possible; diagrams and images were used to clarify and complement written material; target audience needs considered in relation to font size, style, grammar and language; evaluation and Feedback; independent evaluation of materials was undertaken (Rice & Valida, 1991); and, accuracy and readability was checked by an independent medical health professional.

## **Results**

Fifty three of the 226 residents returned their HRAs for analysis – a response rate of 22%; 26 (49%) residents were in the intervention group. The impact of the message delivery via brochures was assessed in both qualitative and quantitative methods. Both methods supported the individualised health packs as a means of providing health behaviour changes. Residents found the information informative and motivating as shown by comments they provided: “... was quite informative”; “... it pointed out my short comings and motivated me to improve on these issues”; “I totally agree with the project and I feel sure most residents will benefit should they desire”. A desire for discussions with a health professional was also expressed: “Excellent concept, would be much better served by personal interview”. The majority also found the brochures easy to understand and said they helped them to realise how their lifestyle impacted on their health (88.9%). Three quarters felt that these brochures helped them to understand how they could improve their health. Slightly fewer reported that the brochures motivated them to plan to improve their health and to take actions to improve their health. As a result of receiving the health information 12 respondents developed a personal health goal to work towards. Residents who received the tailored ‘Individual health packs’ reported significant improvements pre and post intervention behaviours related to dairy consumption, memory and colon screening. Residents in the control group did not show significant improvements in these areas.

## **Discussion**

These findings demonstrated the potential value of providing the elderly with an assessment of their health risks (the HRA) to increase the relevance of social marketing messages promoting health behaviour changes. While brochures alone are insufficient to promote health behaviour change, individualised message have been shown to be effective (Jamison, 2004; Thorogood and Coombes, 2004). Providing tailored feedback about specific health risks, and accompanying this with matching tailored health information as in this study may influence not only susceptibility, but also efficacy (belief in their capacity to engage in the desired behaviour) and provide cues to action (influences or strategies that remind or prompt them to adopt the desired behaviour). Future social marketing interventions could attempt to address resident desire for health professional consultation either online or face to face.

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