Preventing the Spread of Colds and Flu: A University Based Social Marketing Campaign

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Introduction

Each year seasonal influenza in Australia causes an estimated 18,000 hospitalisations, 300,000 General Practitioner consultations, and 1,500 to 3,500 deaths (Newall et al., 2007). Influenza and other viral infections are commonly spread person-to-person by inhaling infectious droplets transmitted when talking, coughing or sneezing (NSW Ministry of Health, 2011). Viruses can survive for an hour or more in the air of closed environments (Weber and Stilianakis, 2008); transmission of the virus from tissues to hands is possible for up to 15 minutes, and from surfaces to hands for up to five minutes (Bean et al., 1982). Individuals in closed communities such as schools, hospitals and aged care facilities are at high risk of contracting an infectious illness as the spread of the virus is aided by humidity and diminished ventilation (Collignon and Carnie, 2006). Transmission risks in universities are similar to those in other closed communities as they host a large number of students and staff daily; these students and staff use shared facilities and spend time indoors in classrooms, libraries and offices. This presents a serious public health issue for universities (Beaton et al., 2007).

Promotion of infection control messages and practices is recommended in community settings (Collignon and Carnie, 2006). Behaviours that reduce the spread of, or protect against infection from, contagious illness include washing hands regularly, covering the nose and mouth when coughing or sneezing, avoiding close contact with others, regularly cleaning surfaces and not sharing personal items (Department of Health and Ageing, 2011). Evidence suggests that university students are not aware of, or not following, these basic procedures to reduce the transmission of these illnesses even in situations of heightened alert and anxiety, such as a pandemic (Van et al., 2010). Perhaps most notable is the tendency to cough or sneeze directly into the air, or into their hands (which then touch communal surfaces such as computers and door handles), rather than into their sleeve/armpit or a disposable tissue.

Why Social Marketing?

Campaigns to reduce the spread of colds and flu have tended to focus on the provision of education material which provide little practical information regarding effective interventions to reduce individual risk of infection and transmission, "leaving the public 'warned' but not well armed to respond to the usual 'cold and flu' season" (Larson, 2006). A social marketing approach was adopted in this project because: we were selling a behaviour; the behaviour change was voluntary; the beneficiary was the individual, group, or society; we wanted to engage in an exchange with the consumer; and we needed a consumer orientation (Kotler and Lee, 2008, Donovan and Henley, 2010). Importantly, an effective strategy to engage the population in the appropriate responses to reduce the transmission of infection requires a careful consideration of the 4Ps, not just 'promotion'.

Methodology

In 2011 we were funded by our university to develop and implement a campus based social marketing intervention, to reduce the spread of cold and flu among the university population. The campaign consisted of six stages including a review of previous campaigns, formative research with university staff and students (focus groups), development of campaign materials, pretesting materials with the target audience (focus groups), campaign implementation and a comprehensive evaluation (pre-post online survey). The key objectives of the campaign were to: raise awareness of the importance of preventing the spread of colds and flu; and provide clear messages to students and staff concerning actions they could take to reduce their risk of contracting or spreading colds and flu. The intervention was evaluated

by comparing responses to an online survey conducted with students and staff before (n=669) and after (n=1175) the campaign.

Implementation of the campaign occurred over a three month period in the peak cold and flu season of 2011 (July to September 2011). A core element of the campaign was a set of recommendations on behaviours (the product) that individuals can adopt to reduce the spread of colds and flu on campus. These were: wash your hands; cough and sneeze into your sleeve; and stay at home if you are sick. As well as a communication campaign (print and digital posters, a website, promotion via university media etc) (promotion), the campaign addressed the barriers to behaviour change identified in the formative research (the 'other 3 Ps'). These strategies included: desktop hygiene centres distributed across campus to enable easy access to tissues and alcohol hand rub (price and place); flu booths with branded merchandise (place, price and promotion), information resources (promotion), and 'flu geek' actors to engage passers-by (place and promotion); and ongoing activities for staff and students.

Results

The results of the pre-post evaluation show that the campaign was highly visible, memorable and effective. *Knowledge*: Unprompted recall of the Cold and Flu Campaign was high, with the majority of students (70.3%) and staff (82.6%) reporting they had seen campaign messages. *Attitudes*: The campaign reinforced the established beliefs that washing hands frequently and staying at home if you are sick were effective strategies for preventing the spread of colds and flu. Beliefs about the efficacy of the 'cough and sneeze into your sleeve' behaviour improved significantly after the campaign, with both staff and students more likely to believe that the behaviour would reduce their risk of contracting or spreading colds and flu after the campaign. *Behaviour*: Pre-post analysis showed statistically significant and meaningful increases in the number of staff and students reporting coughing and sneezing into their sleeve; the number of staff staying home if they are sick; and the number of students washing their hands regularly while on campus.

Discussion

Our intervention clearly communicated the key messages to the target audience, with high unprompted recall, and even higher prompted recall. We were able to change not only attitudes and beliefs, but actual prevention behaviours. The campaign reinforced the 'wash your hands' behaviour, promoted discussion of the 'stay at home if you are sick' behaviour, and convinced many to adopt a new behaviour ('cough and sneeze into your sleeve'). The latter two are particularly notable given the existing social norms which are contrary to the promoted behaviour – the 'soldier on' and come to work norm and the 'ick factor' of coughing and sneezing into your sleeve (rather than the socially acceptable but disease-transmitting 'cover your mouth with your hand').

These changes were achieved despite several limitations inherent in the pilot project – most notably the very short period between the decision to fund the project and the launch of the campaign. Key to the success of this intervention was the use of multiple strategies – addressing all of the 4Ps rather than a single-strategy communication campaign. In addition, the use of a 'settings-based' intervention ensured high levels of awareness and exposure to campaign messages and resources to support knowledge, attitude and awareness change, all of which are sometimes difficult to achieve in small scale community based campaigns.

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