Page 1 of 9 ANZMAC 2009

Industry Partnerships for Health Nonprofits and Disease Awareness Advertising

Danika V. Hall*, Sandra C. Jones & Don C. Iverson, University of Wollongong

Abstract

Marketing partnerships between non-profit organisations (NPOs) and industry generally bring favourable results for both parties (Brønn and Vrioni 2001; Varadarajan and Menon 1988). However, there is some scepticism about corporate exploitation of such arrangements and growing concern in Australia and elsewhere about partnerships between the pharmaceutical industry and NPOs (Angell 2006; Moynihan and Cassels 2005) and the co-sponsorship of Disease Awareness Advertising (DAA). This paper reports the findings from a study of how Australian women respond to DAA with differing sponsors including their ability to identify, and their attitude toward, the sponsor. The results are of importance for health NPOs considering partnership with industry in an effort to promote awareness of a health condition.

ANZMAC 2009 Page 2 of 9

Industry Partnerships for Health Nonprofits and Disease Awareness Advertising

Introduction

Consumer activism and economic growth over the past three decades have resulted in an increase in companies engaging in socially responsibility marketing activities including corporate sponsorship of charities and non-profit organisations (NPOs) as well as cause-related marketing (Dibb et al. 2001; Kotler et al. 2003). Such conduct can benefit companies through enhanced corporate identity and stakeholder relations as well as improving brand awareness, brand image, and ultimately increasing profit (Smith 1994; Weber 2006). These alliances can also benefit NPOs through an increase in exposure and funds for their activities (Polonsky and Wood 2001; Varadarajan and Menon 1988). However, there has been increased scepticism from consumer and public health advocates regarding pharmaceutical company alliances with health NPOs (Angell 2006; Moynihan and Cassels 2005).

Jacobson (2005) was critical of a range of United States health NPOs that appeared to be influenced by their relationships with (and funding received from) industry groups. It has been suggested that such alliances can cause health NPOs to shield industry in times of crisis, and can turn the focus of the NPO toward medicinal treatments rather than behaviour change or prevention (Jacobson 2005; Moynihan and Cassels 2005). Moynihan et al (2005) describe that while many health NPOs work with the pharmaceutical industry to gain greater recognition for their particular cause, the company may be using the relationship to create stronger links between their product and the disease in an effort to increase market share.

Disease Awareness Advertising (DAA)

In Australia, where Direct to Consumer Advertising (DTCA) of prescription medicines is prohibited, pharmaceutical companies can still advertise directly to consumers about the disease or health condition for which they manufacture a product or treatment. This form of promotion is called Disease Awareness Advertising (DAA) and is permissible provided there is no mention of a specific product or brand and consumers are encouraged to consult their doctor for further advice (Medicines Australia 2006).

There is debate regarding the potential positive and negative effects of pharmaceutical company sponsored DAA. There is concern that DAA can inflate the perceived prevalence of disease and create fear and anxiety which potentially leads to unnecessary visits to health practitioners (Mintzes 2006). There is also concern that consumers will not recognize the commercial intent of DAA and perceive it to be form of community service announcement, and therefore will be more vulnerable to its persuasive effect (Mackenzie et al. 2007). There is a counter argument, however, that DAA serves a valuable health education function and helps consumers identify symptoms and be more proactive in seeking treatment (Auton 2007).

In some instances, pharmaceutical companies co-sponsor DAA with health NPOs. A recent Australian example is an advertising campaign to promote bone density testing by Osteoporosis Australia with Merck Sharp & Dohme who produce Fosomax, a product to treat osteoporosis by increasing bone density. There have been some controversial cases of co-sponsored DAA which have brought about a degree of consumer cynicism (Hall and Jones 2006). For example, there was criticism of the National Asthma Council of Australia when it conducted a public awareness campaign using a dragon spokes-character 'Puff', particularly as this same character had been (and is still being) used to market GlaxoSmithKline's asthma

treatment product (Seretide) to general practitioners (Hughes and Minchin 2003). Further examples can be found on the Crikey Register of Influence (Crikey 2009).

From an industry viewpoint, there is evidence of the effectiveness of DAA. Studies in the US and the Netherlands have found that pharmaceutical sponsored DAA resulted in increased prescriptions and market share for prescription products (Basara 1996; t'Jong, Stricker and Sturkenboom 2004). There is a dearth of research regarding the effectiveness of pharmaceutical and NPO co-sponsored DAA. Only one, somewhat dated study was located, where an NPO partnered with a food manufacturer in an effort to reduce bowel cancer. Hammond (1987) conducted the study with 264 volunteers in the US, showing print, radio and television advertisements with a health promotion message (to increase dietary fibre) where the sponsor was manipulated. The sponsor varied between a NPO (the National Cancer Institute), a well-known food manufacturer (Kellogg's), and a combination of the two. She found that the NPO and industry combination sponsor or the NPO sponsor alone, were rated significantly higher by participants than industry sponsor alone. However there was no significant difference between the NPO alone and the combination sponsor. In a commentary on the ensuing advertising campaign, Freimuth (1988) reported improvements in consumer health knowledge and behaviour, as well as an increased market share for Kellogg's.

Source credibility

There is considerable evidence that the use of a highly credible source within an advertisement will increase persuasion (Petty and Cacioppo 1986; Pornpitakpan 2004). Pornpitakpan (2004) identified expertise and trustworthiness as the most commonly identified dimensions of source credibility. Expertise refers to the capacity of the source to provide information on the topic or product, while trustworthiness refers to the audience perception that the source truly believes what it is claiming. Two forms of source credibility can be influential in advertising: that of the endorser or presenter (such as a celebrity); and that of the company or organisation identified with the product (Lafferty, Goldsmith and Newell 2002; Pornpitakpan 2004). This latter form of source credibility is commonly referred to as corporate credibility, and also includes the dimensions of expertise and trustworthiness (Goldsmith, Lafferty and Newell 2000).

Studies have demonstrated corporate credibility can impact on attitudes toward the advertisement, attitudes towards the brand, as well as purchase intention (Goldsmith et al. 2000; Lafferty et al. 2002). In the Hammond (1987) study previously described, while there was no significant relationship found between corporate credibility and message acceptance, corporate credibility did affect behaviour intention.

The current study

It is likely that co-sponsored DAA will increase in the future, particularly in countries such as Australia where DTCA of prescription medicine is not permitted. For the pharmaceutical industry, DAA is one of the few permitted methods for communicating directly with consumers, and its capacity to increase prescriptions and market share for pharmaceutical products has been demonstrated (t'Jong et al. 2004). Partnerships with NPOs are desirable to bolster the source credibility and persuasiveness of advertisements. From the viewpoint of the NPO, increasing competition from other health-related causes and the prohibitive cost of mass-media advertising leaves them in need of industry resources to promote awareness of their particular disease or health condition. However, as previously described, there are

ANZMAC 2009 Page 4 of 9

increasing concerns regarding alliances between health NPOs and the pharmaceutical industry and some examples of co-sponsored DAA that have evoked consumer scepticism (Crikey 2009). The current study aimed to determine whether it is beneficial for health NPOs to partner with the pharmaceutical industry in sponsorship of DAA. In particular, how Australian women perceived advertisements for two health conditions, including their ability to identify, and their attitude toward, the sponsor.

Method

Older women were approached in a commercial shopping centre in a metropolitan area in NSW and shown advertisements for two relatively unknown health conditions: fibromyalgia and osteopenia. Advertisements were developed using marketing-communication principles (Rossiter and Bellman 2005; Rossiter and Percy 1997) but also to reflect current DAA in Australian magazines. The health conditions were selected as the authors could find no evidence of mass media education or past pharmaceutical promotions about these conditions that target consumers in Australia.

Consenting participants were randomly assigned an advertisement using a computer random allocation resource (Urbaniak and Plous 2008). For each health condition, there were three potential sponsor types: pharmaceutical company, NPO and a combination of pharmaceutical company and NPO. Each participant viewed and responded to two advertisements (with the same sponsor type). For example, if a participant was randomly assigned the co-sponsored advertisement for fibromyalgia, they would subsequently be shown the co-sponsored advertisement for osteopenia. Corporate branding of the sponsor(s) was clearly visible at the bottom of each advertisement.

The advertisement questionnaire was developed based on previous questionnaires to determine consumer responses to DTCA and DAA (Hall and Jones 2008; Hoek, Gendall and Calfee 2004). Participants were asked who they thought the advertiser was and responded to a series of bipolar adjective scales, based on instruments used in relevant studies (Lafferty et al. 2002; Newell and Goldsmith 2001). Additional questions were developed to capture demographic information of participants.

Results

A total of 185 women aged between 48 and 85 years (median age of 64 years), completed 356 advertisement questionnaires. According to Australian Bureau of Statistics 2006 census data, women in this age group account for 42.5% of adult women. Similar to census data, sixty nine percent of participants were born in Australia, but 12% were born in the United Kingdom which is higher than census data. Ninety three percent of participants spoke English at home and approximately half had achieved a Year 12 or higher education level.

A total of 178 advertisements were completed for each health condition, with between 116 and 120 in each sponsor manipulation (across both health conditions). While only 36% reported that they or someone they knew well had suffered from fibromyalgia, 63% reported that they or someone they knew well had suffered from osteopenia. On a 6-point scale (1= difficult and 6 = easy) the mean rating of understanding for the advertisements was 5.46.

When asked who they thought the advertiser was, written responses were categorised into five generic categories (*nominated sponsor category*) and compared with the actual sponsor on the advertisement allocated to the participant. Overall, only 51% correctly identified the category of sponsor. The most nominated category was pharmaceutical company (47%), followed by NPO (31%) followed by government/research/medical (G/R/M) (8%). Table 1 shows the *nominated sponsor category* by actual sponsor type allocated. Participants viewing the pharmaceutical sponsor were most likely to correctly identify that category (83% p=.000), followed by those viewing the NPO sponsor where 66% correctly identified that category. Participants viewing the combination sponsor were more likely to nominate pharmaceutical company (49%) or NPO (21%) than to correctly identify the combination sponsor (11%).

Table 1: Percentage of sponsor type vs. nominated sponsor category

Sponsor type	Nominated sponsor category						
	Pharmaceutical	NPO	Combination	G/R/M	Unknown	Other	
Pharmaceutical	83%	6%	0%	2%	4%	5%	
NPO	12%	66%	1%	13%	4%	5%	
Combination	49%	21%	11%	8%	4%	8%	

A score was created for attitude toward the sponsor (*sponsor score*), which included responses to bipolar adjective scales for trustworthiness, expertise, reliability, honesty and believability of the advertiser or sponsor. Item-to-total correlations were greater than .805 and inter-item correlations were between .560 and .853. Principal Components Analysis was performed with one component extracted with an eigenvalue greater than one. All items loaded with values greater than .60. Cronbach's alpha for the 5 item scale was .933. While sponsor scores for all nominated categories were high (see Table 2) a comparison of mean scores for the nominated sponsor category shows that NPO sponsors were rated significantly higher than pharmaceutical sponsors (p=.000). Comparisons could not be made with other categories due to sample size limitations.

Table 2 Mean sponsor score for nominated sponsor category

Nominated Sponsor Category	Mean	N	Std. Deviation	
Pharmaceutical	4.2073	137	1.13641	
NPO	5.1556	90	.82912	
Combination	4.3846	13	1.33532	
Government/research/medical	4.7333	21	.85167	
Unknown	4.8000	6	1.10995	
Other	4.9375	16	1.02168	
Total	4.6099	283	1.10840	

Multiple regression was performed with *sponsor score* as the dependent variable and *condition type*, *nominated sponsor category* (reduced to pharmaceutical or NPO sponsor by replacing other nominated categories as missing values), *age*, *education level* and *personal experience* (if they or someone they knew well had suffered from the advertised health condition) as the independent variables. The combination of the five independent variables significantly predicted *sponsor score* (F degrees of freedom = 15.832, p<.001) and explained 27% of the variation of *sponsor score* (adjusted R²=.266). The results demonstrate that: increased age was independently associated with *sponsor score* (t = 2.642, p = .009); nominated sponsor category was the strongest independent predictor with NPO sponsors

ANZMAC 2009 Page 6 of 9

predicting higher scores (t = 5.780, p = .001); personal experience of the health condition independently predicted higher sponsor scores (t = -2.317, p = .021); and lower education level predicted higher sponsor scores (t = -2.562, p = .011). The advertised condition type (osteopenia or fibromyalgia) did not independently predict sponsor scores (t = .014, t =

Discussion and Conclusion

The results show that only half of the participants were able to correctly identify the sponsor of the DAA despite clear corporate branding at the bottom of each advertisement. Almost half of the participants perceived the advertiser to be a pharmaceutical company regardless of the corporate brand displayed on the advertisement.

In considering attitudes towards the sponsor, older, less educated women and those with personal experience of the condition were more likely to rate sponsors of the DAA more favourably. It is likely that these groups are also potentially more influenced by the persuasive effects of DAA as this has been found to be the case for DTCA (Christensen, Ascione and Bagozzi 1997). Participants who perceived the advertiser to be a pharmaceutical company were more likely to rate this sponsor less favourably than those who perceived the advertiser to be a NPO. These results reinforce findings that NPO and government sources are generally perceived by consumers to be more credible than commercial sources (Hayley 1996). Almost half of the participants receiving co-sponsored advertisements perceived the advertiser to be a pharmaceutical company, and less than a quarter perceived the advertiser to be a NPO, suggesting that co-sponsored arrangements may also be viewed less favourably.

While further research is required to determine consumer perceptions of sponsors of DAA in different mediums, and how this effects their behavioural intentions, the results suggest that consumers would feel more favourably toward DAA sponsored by NPOs alone The growing concern about pharmaceutical involvement with health NPOs, and consumer cynicism surrounding cases of co-sponsored DAA may also detract from potential partnerships with industry in promoting awareness about disease. NPOs however may benefit from increasing the exposure of their own corporate branding in DAA, and ensuring that their advertisements are clearly differentiated from those sponsored by pharmaceutical companies.

References

Angell, M. 2006. The truth about the drug companies: How they deceive us and what to do about it. Scribe Publications. Melbourne.

Auton, F. 2007. The patient as consumer: The advertising of pharmaceuticals to consumers should be allowed and encouraged. Economic Affairs June, 64-72.

Basara, L. R. 1996. The impact of a direct-to-consumer prescription medication advertising campaign on new prescription volume. Drug Information Journal 30, 715-729.

Brønn, P. S. Vrioni, A. B. 2001. Corporate social responsibility and cause-related marketing: An overview. International Journal of Advertising 20, 207-222.

Christensen, T. P., Ascione, F. J. Bagozzi, R. P. 1997. Understanding how elderly patients process drug information: a test of a theory of information processing. Pharmaceutical Research 14 (11), 1589-1596.

Crikey. 2009. The Crikey register of influence. Melbourne: Private Media Pty Ltd. Available at: http:///www.crikey.com.au/register-of-influence/ accessed 24 April 2009.

Dibb, S., Simkin, L., Pride, W. M. Ferrell, O. C. 2001. Marketing concepts and strategies. Fourth European Edition. Houghton Mifflin. Boston.

Freimuth, V. S., Hammond, S. L. Stein, J. A. 1988. Health Advertising: Prevention for Profit. American Journal of Public Health 78, 557-561.

Goldsmith, R. E., Lafferty, B. A. Newell, S. J. 2000. The impact of corporate credibility and celebrity credibility on consumer reaction to advertisements and brands. Journal of Advertising 29 (3), 43-54.

Hall, D. Jones, S. 2006. Direct-to-consumer branding of prescription medicines in Australia. In Ali, M. and van Dessel, M. (Eds). Proceedings of the Australian and New Zealand Marketing Academy Conference (ANZMAC): Advanced Theory, Maintaining Relevance. Brisbane: Australia Queensland University of Technology.

Hall, D. V. Jones, S. C. 2008. Australian consumer responses to DTCA and other pharmaceutical company sponsored advertisements. Australian New Zealand Journal of Public Health 32, 471-478.

Hammond, S. L. 1987. The credibility of organizational sources. Communication Yearbook 10, 613-628.

Hayley, E. 1996. Exploring the construct of organisation as source: Consumers' understanding of organisational sponsorship of advocacy advertising. Journal of Advertising 25 (2), 19 - 35.

Hoek, J., Gendall, P. Calfee, J. 2004. Direct-to-consumer advertising of prescription medicines in the United States and New Zealand: an analysis of regulatory approaches and consumer responses. International Journal of Advertising 23 (2), 197-228.

Hughes, G. Minchin, L. 2003. Drug firms fund awareness. Sydney Morning Herald, 13th December 2003.

Jacobson, M. F. 2005. Lifting the veil of secrecy from industry funding of nonprofit health organisations. International Journal Occupational and Environmental Health 11, 349-355.

Kotler, P., Adam, S., Brown, L. Armstrong, G. 2003. Principles of marketing. Second Edition. Prentice Hall. New Jersey.

Lafferty, B. A., Goldsmith, R. E. Newell, S. J. 2002. The dual credibility model: the influence of corporate and endorser credibility on attitudes and purchase intentions. Journal of Marketing Theory and Practice 10 (3), 1-12.

Mackenzie, F. J., Jordens, F. C., Ankeny, R. A., McPhee, J. Kerridge, I. H. 2007. Direct-to-consumer advertising under the radar: the need for realistic drugs policy in Australia. Internal Medicine Journal 37, 224-228.

Medicines Australia. 2006. Code of Conduct Edition 15. Canberra: Medicines Australia.

Mintzes, B. 2006. Disease mongering in drug promotion: do governments have a regulatory role? Public Library of Science: Medicine 4 (3), 1-5.

Moynihan, R. Cassels, A. 2005. Selling sickness: How drug companies are turning us all into patients. Allen & Unwin. Sydney.

Newell, S. J. Goldsmith, R. E. 2001. The development of a scale to measure perceived corporate credibility. Journal of Business Research 52, 235-247.

Petty, R. E. Cacioppo, J. T. 1986. Communication and persuasion: Central and peripheral routes to attitude change. Springer-Verlag. New York.

Polonsky, M. J. Wood, G. 2001. Can the overcommercialisation of cause-related marketing harm society. Journal of Macromarketing 21 (June), 8-22.

Pornpitakpan, C. 2004. The persuasiveness of source credibility: A critical review of five decades' evidence. Journal of Applied Social Psychology 34 (2), 243-281.

Rossiter, J. Bellman, S. 2005. Marketing communications theory and applications. Pearson/Prentice Hall. Sydney.

Rossiter, J. Percy, L. 1997. Advertising communications and promotion management. Irwin McGraw Hill. Boston.

Smith, C. 1994. The new corporate philanthropy. Harvard Business Review May-June, 105-116.

t'Jong, G. W., Stricker, B. H. C. Sturkenboom, M. C. J. M. 2004. Marketing in the lay media and prescriptions of terbinafine in primary care: Dutch cohort study. British Medical Journal 328 (17 April), 931.

Urbaniak, G. C. Plous, S. 2008. Research randomizer. Available from: www.randomizer.org/about.html, accessed 16 October 2008.

Varadarajan, P. R. Menon, A. 1988. Cause-related marketing: A coalignment of marketing strategy and corporate philanthropy. Journal of Marketing 52 (July), 58-74.

Page 9 of 9 ANZMAC 2009

Weber, L. J. 2006. Profits before people? Ethical standards and the marketing of prescription drugs. Indiana University Press. Bloomington, IN.