Complementary and Alternative Medicine in the News

Billie Bonevski

Senior Research Academic, Centre for Health Research and Psycho-oncology, Cancer Council NSW; and University of Newcastle

Australian news reporting of complementary and alternative medicine is often poor, but a study identifying the problem could also provide the solution.

he use of complementary and alternative medicine (CAM) is rising substantially throughout the world, and the CAM industry is now worth billions of dollars in Australia. Despite this growth, very little is known about how the media reports CAM. One small study examining the type and tone of media reporting of CAM in the UK and Germany suggested some variability in the reporting of CAM. As attempts continue to generate knowledge on the efficacy and safety of CAM, the media has a crucial role in communicating that information to the public.

Importance of Accurate Reporting of CAM

What the media reports affects people's health behaviours. News of Kylie Minogue's breast cancer generated a sustained 101% increase in never-screened women booking for mammograms. Similar patterns in public response have been seen more recently with news of the death of Jane McGrath from breast cancer. Donations to the McGrath Foundation spiked, as did levels of attendance for mammograph screening and calls to medical help lines regarding fear of relapse or death from breast cancer. Similarly, use of hormone replacement therapy drastically fell following reports of possible adverse effects in post-menopausal women.

These examples highlight the importance of accurate and balanced media reports of health news.

The quality of health news reporting directly affects the health literacy levels of Australians. Surveys have shown that most people gain their understanding of health issues from media sources. To improve the health literacy standards of Australians it is necessary to ensure high standard health news reporting.

The Australian Press Council's guidelines for writing health stories are clear about the need for truth and to avoid raising false hope through the presentation of unsubstantiated claims of efficacy. They state that "patients with serious illnesses understandably tend to grasp at any straw; the media should not present straws of doubtful value".

Evaluating Current CAM Reporting by Australian News Media

Health news stories have the potential to inform and educate the public about health issues and influence health behaviour, but studies have found varying degrees of inaccuracy and omission in health news stories. Common concerns about reporting include unnecessary sensationalism, inadequate followthrough, failure to consider the quality of evidence,

inaccurate portrayal of benefits, lack of consideration of adverse effects and costs, and failure to obtain comments from independent informants.

One recent Australian study quantitatively measured the quality of CAM news reports. Using a national web-based media monitoring program, Media Doctor, the project rated CAM news articles published in Australian news media between 2004 and 2007. Over 220 articles were rated. Stories were taken from a representative sweep of media outlets: tabloid and broadsheet newspapers (including the *Daily Telegraph*, *Herald-Sun*, *Sydney Morning Herald*, *Australian* and *Age*), online news sources (including ABC Online and ninemsn) and television (including Channel Seven's *Today Tonight* and Channel Nine's *A Current Affair*).

The articles were rated against 10 criteria measuring completeness, accuracy, balance and aspects of sensationalism. The articles used in the analysis included a range of CAM treatments:

- biologically based practices (including dietary supplements, botanicals, animal extracts, vitamins, minerals, fatty acids, amino acids, proteins, probiotics, whole diets and functional foods);
- energy medicine (including visible light, magnetism, laser beams, other electromagnetic forces and biofields such as ki, doshas, prana, atheric energy and mana);
- manipulative and body-based practices (including chiropractic manipulation, osteopathic manipulation, massage therapy, reflexology, Bowen technique and the Alexander technique);
- mind-body medicine (relaxation, hypnosis, visual imagery, meditation, yoga, biofeedback, qi gong, cognitive behavioural therapies and spirituality);
- whole medical systems (including traditional Chinese medicine, ayurvedic medicine, naturopathy, homeopathy and acupuncture).

These categories were derived from those currently used by the Australian drugs regulator, the Therapeutic Goods Administration (TGA).

Disappointingly, the results showed that the quality of health news reporting of CAM is not unlike that of other conventional medicines, and generally poor. There was a small increase in ratings between 2004 and 2007, but this change of around 5% did not reach statistical significance. Overall, the data show that the public are being poorly served by some media outlets, particularly current affairs television programs.

Generally, the CAM stories only scored an average of 50%, meaning that in most cases only five out of 10 rating criteria were met. The results show that when news stories about CAM are rated using the 10 widely accepted criteria, scores are variable and generally low. Scores varied according to the type of CAM therapy reported on, the clinical outcome of interest and the media source. When reporting CAM it appears the media are particularly inconsistent at reporting the costs, and potential harms and benefits.

The highest ratings were seen for stories about biologically based CAM treatments and treatments for cancer. The lowest ratings were associated with stories about treatments for behavioural disorders in children.

It is difficult to understand why there would be differences in reporting standards for different health concerns. The evidence here suggests that claims of the success of CAM in treating some conditions are being inadequately scrutinised. There appears to be the need for universal standards that apply to all health news reporting, regardless of what they are reporting about and where it is published.

Examination of individual criterion scores showed that six of the 10 criteria scored less than 50% satisfactory for all media reports evaluated. Similar observations have been made in overseas studies of health news reporting of new drugs and mammography

screening. Most stories failed to mention the costs and potential harms of the CAM treatment. These results are concerning given the limited amount of information about the safety of many CAMs, and the potential for some to interact with conventional medicines.

Almost two-thirds of the stories failed to obtain a comment from an independent source or expert. Information from independent sources has the potential to offer balance in a story.

Most articles that quantified the benefits of CAM framed them in relative terms, which can give an overly opti-

Criteria for Rating News Reports

- 1. Was the novelty of the treatment reported?
- 2. Was the availability of the treatment reported?
- 3. Were treatment options described?
- 4. Did the story contain elements of disease-mongering?
- 5. Was the reporting of evidence (study methodology) included?
- 6. Were benefits framed in both relative and absolute terms?
- 7. Was there mention of potential harms?
- 8. Was there mention of costs?
- 9. Was an independent comment included?
- 10. Was the story sufficiently different from the press release (where this was available)?

mistic impression of treatment efficacy. Decisions about medical treatments are often made by balancing harms and benefits. Research has shown that most people, including clinicians, choose interventions whose benefits are framed in relative rather than absolute terms.

The variation in scores across media outlets is consistent with previous results about health news reporting in general. In 2005, Media Doctor reported the results of the analysis of its first 104 health news articles. In that study the print media significantly outperformed online news services (overall mean scores of 56.1% and 40.1%, respectively). The earlier study was limited by the inclusion of only five media outlets (three national newspapers and two online news services). The current study has a number of advantages including larger sample size, greater specificity (examining CAM stories only), and coverage of a wider media base.

Overall, broadsheet newspapers scored higher than current affairs programs. These results mirror previous research which found that "hard" news reports are generally more accurate than feature stories and that print media reports are more accurate than those of television. Regardless of the type of media, each of these outlets is responsible for the mass communication of health information and it would seem the challenge is to develop ways to lower the variability with which health news is reported.

Can CAM Health News Reporting Improve?

The Media Doctor study provides indirect evidence that CAM news reporting could be improved. Large differences in scores between media outlets indicate that some journalists are capable of writing excellent stories about CAM. Of the 222 articles analysed in the study, four achieved scores of 100%, showing that it is possible to meet all criteria. These articles included discussions about the novelty and availability of the new treatment, its costs and potential harms, evidence about its effectiveness and the appropriate framing of data on benefits. They included comments from individuals with no conflict of interest, avoided diseasemongering and did not rely heavily on the press release for the content of the story. A further 19 articles achieved scores between 80% and 99%, showing that most of the criteria can be met.

Some of the barriers often cited for the shortcomings of reporting include editorial pressures to produce short stories quickly, lack of health news-

Media Doctor

The Media Doctor website (mediadoctor.org.au) was launched in 2004 with the aim of objectively analysing the strengths and weaknesses of health stories published in the mainstream Australian media.

Media Doctor reviews health news stories from newspapers, radio and television (commercial and ABC). Stories about new medical interventions, drugs, surgical procedures and diagnostic tests are eligible for review, as are articles about complementary therapies.

Media Doctor has reviewed more than 1230 news stories, and sibling sites have been launched in Canada (www.mediadoctor.ca) and in the USA (www.healthnewsreview.org). Sites will soon be launched in Hong Kong and Brazil, and researchers in other countries have expressed interest.

Media Doctor uses a range of reviewers from health and journalistic backgrounds to review the articles on a voluntary basis. Each story is reviewed twice using a validated rating instrument with 10 criteria: novelty of the treatment, its availability, disease-mongering, benefits, harms, evidence, sources, cost and alternative options available. Reviewers also post commentaries on each article.

All reviews are archived on the website, and a host of other features, including cumulative scores for the major media outlets, are available to journalists, health professionals and the general public alike.

specific training, inadequate press releases from the scientific community, a focus on the controversial and exciting story, and a lack of high-level evidence for CAM in general. Feedback and education for the health media may address some of the reported barriers to optimal health reporting. There is a need to change the methods of promoting research findings within the scientific community and to improve training for health journalists.

There is substantial variability in news reporting about CAM. Overall, standards are generally low and the small improvement noted in one Australian study was not statistically significant. Much of the information the public receives about CAM is inaccurate or incomplete. The development of strategies aimed at improving health news reporting deserves more focused attention from both the media and researchers.