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The use and misuse of media headlines: lessons from the MeNZB™ immunisation campaign

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Abstract

Aim Tracking the use of headlines with single issue stories in the New Zealand print media from their source, three case studies of the MeNZB™ vaccination campaign's presentation in the print media were examined.

Method Article headlines were tracked in the three case studies. All headlines were coded between two researchers to review for accurate or misleading presentations in terms of whether the headlines matched the article content.

Results In these three case studies 26 out of 51 headlines were inaccurate when compared with the article content (51%), with a further 6 being misleading (total of 61%).

Conclusions These small case studies illustrate the difficulties arising at the intersection between media and public health interests. There is an inherent tension between public health publicity needs, and the print media needs. To maintain public confidence, health planners constantly need to develop and review their health promotion messages and relationships with the media. Close and ongoing dialogue between media and public health professionals are important, with recognition on each side of the different drivers and needs in two different sectors.

New Zealand's (NZ's) rates of meningococcal B disease were reaching over 200 per 100,000 children less than 1 year of age in 2004.¹ NZ's largest immunisation programme was implemented in July 2004 in response. A strain-specific vaccine was designed specifically for the NZ epidemic, and provided for all children aged 6 weeks to 20 years of age in the country. The delivery programme commenced in the area of highest disease rate, South Auckland, and then rolled out progressively around the country to children in all areas over the next year.² By 2006, over 3 million doses of vaccine had been delivered to NZ children and youth.³ With the recent cessation of the MeNZB™ programme, it is timely to investigate some of the lessons learnt by understanding a snapshot of this campaign's portrayal in the media.

Media activities can directly affect immunisation uptake both positively and negatively.⁴ Media reports questioning vaccine safety can significantly affect parental concerns.⁵⁻⁸ and ultimately immunisation coverage rates.^{9,10} Media reportage can also have a positive effect. A Cochrane review concluded that mass media should be considered a tool that may encourage use of effective health services and discourage those of unproven effectiveness.¹¹

This research project focused on tracking single issue stories from their source during the MeNZB™ immunisation campaign. We tracked their spread through the NZ

media, examining how the headlines for the stories were presented in different media in terms of accuracy or misleading presentations with respect to the story.

The reach of the mainstream print media in NZ is wide, covering all homes in all regions at least once a week (including the free regional newspapers), although not necessarily read in all homes. The NZ media uses the services of the New Zealand Press Association (NZPA), which is a 24-hour, 7-day-a-week service providing national and international news to the country's media. The NZPA news is available through its commercial division, NZPA Content Services. News is purchased for publication in newspapers and magazine, and is widely used by NZ print media nationally.

The subeditor of the newspaper, not the journalist who crafted the article, usually generates the headlines in print media articles.

Methods

NZ print media clippings were collected from 400 different national and regional publications for the years 2004/2005, covering over 5000 articles. These were obtained from a professional clipping agency which inspects all national daily and weekly newspapers, non-daily suburban and provincial papers, and magazines including health-related publications and provides copies of all articles that make reference to immunisation, vaccines, or vaccination.

All articles were entered into an Microsoft Excel database and fields included date, type and region of media source, title, and coding themes.

To analyse the use of a headline, all articles in 2004/2005 were scanned for articles that arose from a single NZPA story, and were taken up broadly by many media throughout the country. Case studies were selected based on being a single factual story around the meningococcal epidemic and vaccine, and having wide print media coverage to many regions in the country. Three examples were chosen as coming from a factual story and resulting in wide distribution throughout the country, both in national and regional print media.

The headlines were listed and coded separately by two independent researchers as being either an accurate presentation of the issue, ambiguous, or inaccurate when comparing the headline to the content of the article. The researchers were in agreement in all codings. If the headline reflected the content of the article it was coded as accurate, if it did not reflect the content of the article it was coded as misleading and if it reflected aspects of the story without clearly representing content, particularly the main focus, then it was coded as ambiguous.

Results

Story A—It is reported that initially one, then two, young children have caught meningococcal disease and are in hospital. While it is not known exactly what strain of meningococcal disease they have, it is established that neither has the epidemic strain type meningococcal B disease (type B:4:P1.7b,4). Both these children have been recently fully immunised against the epidemic strain, but this vaccine does not cover other strains of meningococcal disease.

The original story generated a total of 30 print media articles around NZ over the dates 22 November 2004 to 2 December 2004.

Of 30 articles, 9 had accurate headlines, 6 had ambiguous headlines, and 15 had misleading headlines. Two of the articles were from national media; both were in the misleading category.

Table 1. Story A: Comparing accuracy of headlines to content of article

Accurate	Ambiguous	Misleading
Immunised tot catches another strain of disease	No meningococcal vaccine 100 percent effective – ministry	Child not protected
Vaccinated child catches different meningitis strain	No vaccine ever 100% effective, says ministry	Vaccinated child in hospital
Vaccinated child catches different strain of disease	‘No meningococcal vaccine 100 percent effective’	Toddler struck down
Vaccinated child catches variation	Vaccine not ‘100 percent effective’	Vaccine fails
Vaccinated boy sick with another strain of killer bug	Vaccinated children still at risk	Immunised children catch killer disease
Stay vigilant	Jabs can’t give complete cover	Vaccine fails to protect
Jabs can’t cover all strains		Two children develop meningococcal disease despite being immunised
Jabs can’t protect against all strains		Two children ill despite vaccine
Vigilance advised		Two children have disease
		Two ill, despite vaccine
		Two develop meningococcal disease after vaccine
		Two children developed meningococcal disease after vaccine
		Children catch disease
		Two meningococcal cases despite immunisation
		Sick children no surprise to anti-jab campaigner
n=9 (30%)	n=6 (20%)	n=15 (50%)

Story B—The story announces the first day of the launch of the mass meningococcal B vaccine programme for children aged 6 months to 5 years in Central Auckland, the largest city in NZ, and Northland (the most northern province). The main themes are announcing the launch, and discussing vaccine safety, quoting the Independent Safety Monitoring Board (ISMB) findings and the clinical trials findings, which all found no major safety issues.

The story also quotes the opinion of an anti-immunisation lobbyist who gives anecdotes of children reputed to have reactions to the vaccine. This story generated 8 articles all on the same day. For a total of 8 articles there were 3 accurate headlines, and 5 misleading headlines.

Table 2. Story B: Comparing accuracy of headlines to content of article

Accurate	Misleading
Meningitis jabs begin	Dispute over vaccine risk goes on
Preschoolers get jabs	Mass vaccination proceeding despite concerns
Vaccinations begin	Vaccine debate continues, 25,000 face needle
	Vaccine row rages
	Meningococcal vaccine risk dispute goes on
n=3 (37.5%)	n=5 (62.5%)

Story C—The Minister of Health visits a health centre and announces a milestone in the campaign: more than 2 million meningococcal B vaccine doses have now been delivered nationally to almost 78% of the eligible population.

The programme aims to achieve 90% coverage with all 3 doses (and still has another year to run) and the Ministry spokesperson reports that it was unlikely to reach this goal in all areas, but was likely to reach targets in the most important high risk groups (see Table 3). This story generated a total of 13 articles over the period 18–19 August 2005, and a further article on 31 August 2005.

Overall 7 headlines were accurate and 6 were misleading. Note that here headlines were coded as misleading if they focused on overall campaign failure: while the statement was that some areas may not reach the target, this does not mean the target overall will not be reached, and furthermore targets were expected to be met for the highest risk groups who were the key focus of the campaign.

Table 3. Story C: Comparing accuracy of headlines to content of article

Accurate	Misleading
Acceptance of vaccine widespread	Vaccination goal may be missed: ministry
Milestone for vaccine plan	Vaccine drive short of goal
Vaccine campaign reaches 2 million	Vaccine goal unlikely to be met
Two million doses delivered	Vaccination campaign falling short
Heavy dose	Campaign falls short
Two million doses of vaccine delivered	Meningococcal likely to miss target
Two million doses of vaccine now delivered	
n=7 (54%)	n=6 (46%)

Table 4. Summarising accuracy of all headlines to all articles

Headline and content accuracy	Total (stories A, B, C)
Misleading headline	26 (51%)
Ambiguous headline	6 (12%)
Accurate headline	19 (37%)
Total	51 (100%)

Discussion

Public health consequences of media activities are well documented internationally, and can be dramatic, such as the case of pertussis in the 1970s and 1980s where negative press lead to reduction in immunisation coverage internationally and consequent disease outbreaks.⁹ In Wales there was extensive adverse print media coverage of the measles, mumps, rubella (MMR) vaccine in one local newspaper from June to September 1997. Following this there was a 13.6% decline in vaccine uptake in the distribution area of that publication compared to a decline of only 2.4% elsewhere,¹⁰ illustrating the power of local newspapers.

It is a challenge for national vaccination campaigns to present data and stories that will be taken up accurately by media. These small case studies illustrate the difficulties arising at the intersection between media and public health interests. The needs and drivers for the print media differ from public health drivers. Media needs are focused around selling the story, not around accuracy of a health message. Key aspects of a good media story include making it relevant to the reader, to their personal current concerns, and of human interest. Essentially the print media needs to engage the audience to sell the product.

Research to date has focused on the content of articles, not on the headline. These case studies are focusing on the impact of the headline, and how it matches to the article. Headlines are frequently developed by subeditors independently of the journalists who write the articles, and hence there can be quite a difference in intent between the headline and the article.

In these three case studies 26 out of 51 headlines were misleading (51%), with a further 6 (12%) being ambiguous (total of 61%).

Implications—To maintain public confidence, health planners constantly need to develop and review their health promotion messages and communications with the media. This requires broad relationships with many levels of media, not just with the national origins of the stories, but also the local media management of stories and of the headlines. There is an inherent tension between public health publicity needs, and the print media needs. To reconcile these competing needs health planners need greater awareness of triggers and drivers in the media world. More research is needed into how specific public health issues are reported in the media so health planners are able to better understand media drivers.

These case studies clearly demonstrate a wide range of responses generated within the media to the same story, showing there is not a standard predictable response, and individual journalists and subeditors can chose very different angles on the same

theme. One can assume it will be difficult to consistently predict the behaviour of the print media with any one story.

Journalistic and print media needs can be in conflict with responsible presentation of public health messages. Close and ongoing dialogue between media and public health professionals are important, with recognition on each side of the different drivers and needs in two different sectors.

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References:

1. Martin D, Lopez L, McDowell R. The epidemiology of meningococcal disease in New Zealand in 2004. Wellington: Ministry of Health, 2005.
2. Sexton K, Lennon D, Oster P, et al. The New Zealand Meningococcal Vaccine Strategy: A tailor-made vaccine to combat a devastating epidemic. *N Z Med J.* 2004;117(1200). <http://www.nzma.org.nz/journal/117-1200/1015>
3. Ministry of Health. Meningococcal B Immunisation Programme Update. Newsletter to Primary Care Providers, 2006.
4. Danovaro-Holliday MC, LeBaron CW, Allensworth C, et al. A Large Rubella Outbreak with Spread from the Workplace to the Community. *JAMA.* 2000;284:2733–9.
5. Mansoor O, Sarfati D, Durham G. Is confidence in immunisation declining? *N Z Med J.* 1998;111:300.
6. Leask J, Chapman S. 'The cold hard facts' immunisation and vaccine preventable diseases in Australia's newsprint media 1993-1998. *Social Science & Medicine.* 2002;54:445–57.
7. Leask J, McIntyre P. Public Opponents of Vaccination: A case study. *Vaccine.* 2003;21:4700–3.
8. Leask JA, Chapman S. An attempt to swindle nature: Press anti-immunisation reportage 1993-1997. *Australian & New Zealand Journal of Public Health.* 1998;22:17–26.
9. Gangarosa EJ, Galazka AM, Wolfe CR, et al. Impact of anti-vaccine movements on pertussis control: the untold story. (Review). *Lancet.* 1998;351:356.
10. Mason BW, Donnelly PD. Impact of a local newspaper campaign on the uptake of the measles mumps and rubella vaccine. *Journal of Epidemiology & Community Health.* 2000;54:473–4.
11. Grilli R, Ramsay C, Minozzi S. Mass media interventions: effects on health services utilisation. *Cochrane Database of Systematic Reviews* 2002, Issue 1. Art. No.: CD000389. DOI: 10.1002/14651858.CD000389.
12. Altheide DL. *Qualitative media analysis.* Thousand Oaks, CA: Sage Publications, 1996.
13. Altheide DL. Tracking discourse and qualitative document analysis. *Poetics.* 2000;27:287–99.