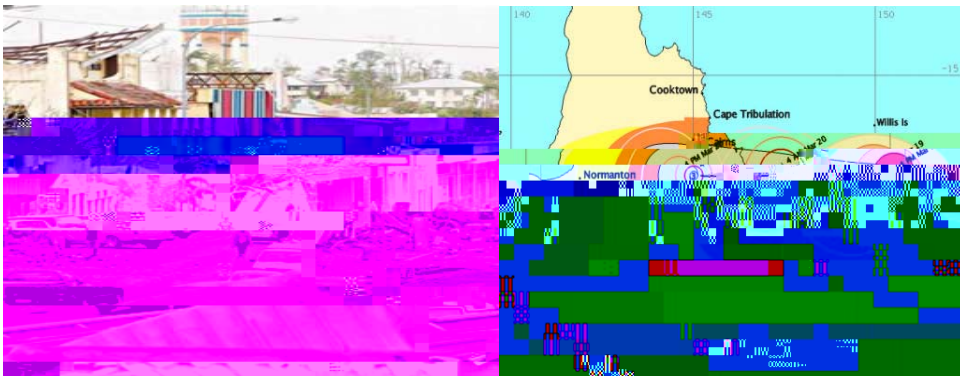


EV3606:03
Diaster: Vulnerability, Mitigation and Planning
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Does the Media Prepare People for a Disaster?
(Cyclone Larry Secondary Data Project.)



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Introduction

Literature Review

Media coverage of disasters is often a very common occurrence (Telg and Raulerson 2000) although media coverage is usually perceived as somewhat 'superficial and stereotypical' level depicting stories that lead people to believe exaggerated circumstances that are associated with the most graphic (and best selling) pictures (Telg and Raulerson 2000). Timely, accurate and sensitive communications in the face of natural hazards are demonstrated, cost-effective means of saving lives, reducing property damage and increasing public understanding of impending disasters (Cate (ed.) 1994). These communications can educate, warn, inform and empower people to take practical steps to protect themselves from natural hazards (Cate (ed.) 1994). Responding to the news media following a mass disaster is crisis communication in action (Kelly 1998).

A significant proportion of the population in many communities fail to respond appropriately or adequately to emergency warnings. Many people tend to rely on emergency services to provide the essential information on which they may base their defensive action that will ensure their immediate and longer term safety (Bushfire Cooperative Research Centre n.d.).

Communication during a major disaster needs adequate improvement and remains a critical issue requiring additional effort and assessment of effective communication and is essential for the safety of both people and property in the face of prominent looming disasters (T

Risk communication is an ongoing difficulty for emergency services. The need for better, timely warnings and advice particularly on preventative action is a critical component needed to be added to information broadcasted by the media (BCRC n.d.; Ferrier and Emdad Haque 2003). Communities need support to achieve effective risk communication networks, by having working relationships with the media and all emergency services so these services can provide the most adequate support to their community (BCRC n.d.) The media plays a fundamental role in this support network in allowing the flow of information to the greatest amount of people most efficiently.

Many publications have expressed that disaster mitigation organisations should focus more on public information efforts and that the media should focus more of its coverage on disaster prevention and reduction rather than loss of life and damage to property. It was also noted that disaster mitigation agencies and the media should identify and communicate to the public specific measures that have either succeeded or failed to reduce the impact of natural hazards. The public and media obsession with death and dying could be focussed on other aspects of the disaster. For example, not just inform how much destruction was caused but provide information that survived compared to those that did not (Cate (ed.) 1994).

There is often a large amount of work needed to be done to educate the public in precautionary disaster approaches, especially in highly vulnerable and densely populated areas.

Additional warning strategies, besides the use of mass media needs to be implemented to produce more effective communication. Sometimes when traditional media sources can not be used (i.e. no electricity, eradicating mobile phone networks)

Results

Table 2 – Preparations prompted by warnings and the information source.

Preparations prompted by warning * Info source on Sunday Crosstabulation

Count		Info source on Sunday							Total
		Radio	TV	Friends & Relatives	BoM website	Local Authorities	Multiple sources	TV & radio	
Preparations prompted by warning	tape windows	1	1	1	1		1		5
	Clear yard	10	4	1	7		10	11	43
	Buy supplies	2	1		1		3	1	8
	Buy fuel	1							1
	Evacuate		1				2		3
	Repair building/trim vegetation	1					1		2
	Secure car and/or boat		2						2
	Secure other belongings	1	1		1		1	2	6
	Nothing	7	7	2	1		6	3	26
	Store water	2	4					1	7
	food preparation		1						1
	clear yard & secure boat	5	1		1		1	2	10
	Clear up, shop & secure	5	2		6	1	6	6	26
	Buy supplies & store water	2	1	1					4
	Store water & secure belongings	1			1			1	3
	Total	38	26	5	19	1	31	27	147

The above graph depicts further actions that were undertaken after the cyclone Larry warning was issued. It notes the information source on the Sunday when cyclone Larry was perceived to pose a threat to the area. Yard clearing was the most undertaken action on the Sunday with mass media again being the most acknowledged sources. Also securing other items (i.e. boats) and shopping for supplies were also other actions undertaken. A significant proportion of people undertook no further preparations at this time.

Table 3 – Source of tracking map and its use

Source of tracking map * Used tracking map Crosstabulation				
Count		Used tracking map		Total
		Yes	No	
Source of tracking map	BoM website	29	1	30
	Phone book	4	1	5
	Brochure	1	1	2
	Council	6	10	16
	Did not use map		83	83
	newspaper	6		6
	family/friends	2	1	3
	phone book & shop		1	1
Total		48	98	146

This graph portrays the amount of people surveyed who used the tracking map and where the sourced the map. Nearly two-thirds did not use the tracking map and those who did, the Bureau of Meteorology website was the major source for utilising this information.

Table 4 – Time preparations began and there adequacy.

Time of beginning preparations * Adequacy of Preparations Crosstabulation							
Count		Adequacy of Preparations					Total
		Excellent	Good	Pretty good	Fair	Poor	
Time of beginning preparations	Before Saturday	3	13				16
	Saturday	5	23	1	1		30
	Sunday before 9		2	1			3
	Sunday 9-1	1	16	4	1		22
	Sunday 1-5	3	30	5	2		40
	Sunday 5-8	1	5	1	1	3	11
	Sunday after 8		8		2		10
	none made	1	9		1	1	12
Total		14	106	12	8	4	144

This cross-tabulation depicts when people began preparations for the impending Cyclone Larry and the adequacy their preparations. One-third of people only undertook preparations Saturday or Sunday just prior to Larry’s landfall. Over two-thirds of people rated their actions as adequate for the situation in preparing for cyclone Larry’s impact.

Table 5 – Bureau of Meteorology Cyclone advice and its usefulness

anking.

of BoM messages Crosstabula

	1		2	16
1	10	1	3	39
	9			12
	7		1	10
	9		1	39
			<u>1</u>	

Table 7 – Property damage and adequacy of Preparations.

Property damage * Adequacy of Preparations Crosstabulation							
Count		Adequacy of Preparations					Total
		Excellent	Good	Pretty good	Fair	Poor	
Property damage	Minor	9	46	2	1	1	59
	Some damage	3	31	4	2	2	42
	Minor to windows		6	2	1		9
	Roof damage from trees	1	7				8
	Damage to walls		4	1	1		6
	Vegetation destroyed	1	2	1	1		5
	house shaking		1				1
	damage to other properties/farm		1				1
	roof loss		7	1	2		10
	none		1	1		1	3
Total		14	106	12	8	4	144

The graph above shows that people that were prepared seemed to suffer little significant damage on their properties. There were only minor instances where there was significant damage to homes and their properties even if adequate preparations were undertaken.

Discussion

The main continuing themes that appears to be most prominent in the cross tabulations between media sources and the usefulness, adequacy and the assistance provided by the information given by the media included:

- § Most people perceived warnings and advice notices to be helpful and instigated action to prepare for the coming cyclone;
- § Radio and television (and newspapers) were the most accessible and noted media sources for obtaining current information. The Bureau of Meteorology website was also noted as a well utilised source although given the demographics of the affected area was not accessed by many residents;
- § Cyclone warnings promoted more action than the general pre-cyclone season advice;
- § Many people did not take action (yard clean-up, securing belongings) until the disaster was near – a day or two before the cyclone struck;
- § The cyclone tracking map was not utilised by over half of the interviewed people
- § Many improvements were noted to make media communication more effective in times of an impending disaster;
- § Much of the knowledge used was gained through personal experience and knowledge;
- § Many people also did nothing as a result of advice and warnings given by the media; and
- § Many people suffered little significant damage to their properties and perceived to have adequately prepared for the cyclone.

These common themes provided a basis to state that the media, in this case, was an effective way to announce important and up-to-date information to the most people adequately and at the times when it is most needed. Suggestions to improve the community communications and community preparedness would be to include suggestions of what actions to take in the lead up to the cyclone season, what actions to take during the cyclone and how to recover from its affects. This will aid those people that have not experienced a cyclone event before or are not familiar with the local area.

It was also noted that those that many people did not take action in response to the cyclone season advice or cyclone warnings. However, these people appeared to have relied on their own personal experience and knowledge to prepare them for the event. This does not portray a failing in the successfulness of the media to get its message across, but that many people may have already been prepared and did not act on the advice of the warnings as they already had completed these tasks and knew what precautions they should undertake to be best prepared for a disaster. Two-thirds of those surveyed indicated that the received little damage to their properties. Of these two-thirds most of them perceived themselves to have taken adequate action to prepare for the effects of the cyclone.

The most noted and common recommendations on how to improve communications in the event of a disaster included:

- § More frequent and prominent warnings;
- § More advice on ‘what-to-do’ actions;

- § Ensure up-to-date coverage particularly within the local zone to allow for residents to make informed decisions especially at times when the disaster is close to landfall; and
- § Have stronger campaigns for pre-season actions to avoid ‘last-minute’ clean-ups and risks.

Noted improvements by Telg and Raulerson (2000) on how to use improve effectiveness of communication during a disaster could be to;

- § Better utilisation of public information network systems to help maintain contact with local public information givers during a crisis;
- § Establishing experience-based classification levels for public information officers in various management response agencies; and
- § Being informed of the skill levels and experience of public information officers dispatched in impacted area (Telg and Raulerson 2000).

Specific communication-related recommendations include catering to local media area before the national media. Local reporters will often provide immediate, important information to the area’s residents (Telg and Raulerson 2000), where it is most needed. Initiate more World Wide Web page development and campaigning to allow easy access to information and provide other automated services, such as 24-hour telephone hotlines with update news coverage to allow easy access to information.

Alternatives means of communication with the public other than through the mass media also need to be considered to allow a broader-based approach to disaster preparedness (Cate (ed.) 1994). An example in Ecuador has not only utilised cooperating television and radio stations, but also printed on soccer balls, colouring posters and in colouring books to reach communities that may be beyond the reach of mass media. The balls, posters and books appeal more directly to children and provide a more interactive and entertaining educational mechanism that allows for a wider audience to be reached.

A suggestion by a former television network executive in the USA would be to develop a collection of simple, consistent, readily understandable icons providing instructions for disaster preparedness (like the widely recognised emergency exit indicators or “no smoking” signs) these would be able to provide specific warnings (i.e. high wind warnings, cyclone watch) or instructions (i.e. move to higher ground; take cover) (O’Brien 2006).

Another important issue to be raised it that much of the media coverage is focussed on the immediate aftermath of a disaster ‘event’ where a more useful approach would have a focus on disaster prevention and response especially within local areas (Cate (ed.) 1994). Resilience is not a science, it is a process, using human capacity and ingenuity to mitigate vulnerabilities and reduce risks both of which are socially constructed (O’Brien 2006).

Conclusion

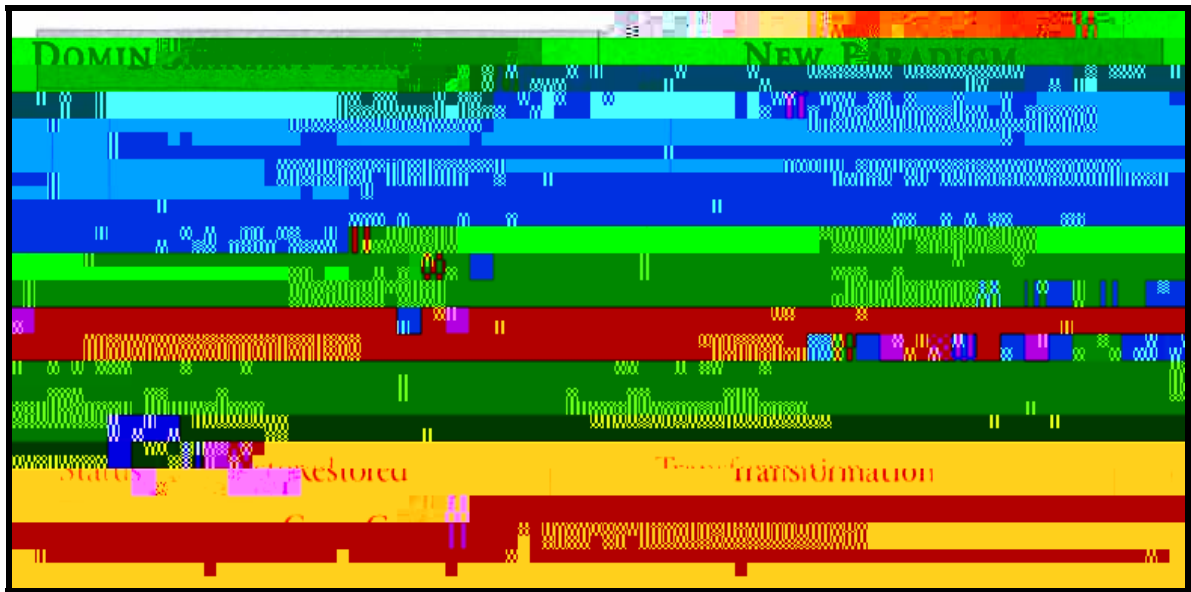
Early warning of impending disasters and their effective broadcasting using telecommunications including broadcast service 8424/MCID 1 BDCSDC cn042 Tm(rvic842T/TT1 1 Tf0.0

Appendix

Appendix 1 – Reported Damage to the region after Cyclone Larry.

Location	Damage
Mareeba / Eacham / Millaa Millaa	93 damaged properties
Babinda	80% of buildings damaged
Flying Fish Point	15% of homes damaged
Innisfail	50% of homes damaged 35% of private industry damaged

Appendix 2 – Changes in Disaster Management Paradigms



Source: O'Brien 2006

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