

A good starting point would be to strengthen response planning. It is critical to develop evacuation plans, and to engage members of the public to create community-specific strategies, along with event thresholds that should trigger evacuations. Developing these plans could be included in efforts to promote more fire-ready communities. Mutual Aid Agreements between municipalities and plans and instruments to guide inter-agency and inter-departmental resource-sharing would facilitate more rapid and efficient action. Another is to ensure that all firefighting resources are properly equipped and trained to fight wildfires. As noted earlier, the insurance industry can assist in building local firefighting capacities through platforms such as Santam's Partnership for Risk and Resilience (P4RR) initiative.

Turning to the humanitarian response, this research highlights:

- the municipality's limited resources, facilities and expertise to manage large-scale relief operations;
- the need for standardisation with respect to beneficiary criteria and standards of relief and donation management systems;
- the importance of data collection and standardisation; and
- mechanisms to ensure information-sharing and alignment of relief activities across organisations.

The multiplicity of role-players involved in the humanitarian response, the flood of donations, and inadequate systems for managing these were key challenges, suggesting that the WCDS and disaster management agencies need to identify and engage with NGOs involved in providing humanitarian assistance in the GRDM to define roles and responsibilities and minimum standards of relief during disasters. The guidelines being developed by both the WCDS and the GRDM provide an opportunity and framework for engaging with a broader suite of NGOs. Given the lack of capacity in local government to cope with large-scale relief operations in many parts of South Africa, the findings suggest that local governments should consider alternative relief models that tap the expertise and capacity of NGOs. It is important that all NGOs are thoroughly vetted and that municipalities engage with and monitor NGOs on an ongoing basis to ensure fairness and the integrity of relief provision.

10. CRISIS COMMUNICATION DURING THE KNYSNA FIRES

Communication represented a critical challenge in all aspects of the response. Communication between the authorities and members of the public was sometimes poor, and as noted already, social media introduced an additional layer of complexity. Infrastructural failures, and the sheer volume of information and the speed with which the information changed, made communication more difficult. Unfortunately, a coherent media and communications strategy only emerged as the incident developed. Communication gaps were most evident in three areas:

- Evacuations

Members of the public frequently did not receive evacuation orders or instructions, or received information via friends and family members rather than official channels. Where people did receive orders, these did not always include essential information about what was happening or where to go. This created confusion; there were reports of people evacuating into the path of the fire, and then needing to re-evacuate (Edwards *et al.*, 2017, VWM, 2018).

- Requests for volunteers

There was no clear communication with members of the public regarding the need for volunteers, in the absence of which people self-dispatched. Although volunteers played an important role in the response, many of the volunteers lacked the appropriate training and were often not needed. Clear communication of needs early on during the incident would have made things easier.

- Requests for donations

Initially, there was also insufficient guidance provided to members of the public with respect to what donations were needed. In the absence of a communication strategy, many people donated inappropriate or unnecessary items. This was compounded by the absence of a donation inventory system, which prevented real-time analysis of gaps and a clear idea of the items needed and where. Ultimately, far more was donated than was needed, creating storage challenges and the problem of what to do with surplus items.

This underscores the importance of timely, proactive and clear communication to optimise and harness the goodwill generated during these kinds of incidents. Knysna Municipality's communication team made significant progress over the course of the incident, using a range of different media, and improving the targeting and quality of information over time. This included using contact details from the Municipality's data on rate-payers to SMS evacuation orders to specific areas.

Key point:

Communication between the authorities and the public was sometimes challenging. Difficulties associated with the event, particularly self-dispatching and donations, were in large part due to this communication gap and might have been avoided. Early, clear and ongoing communication is essential not only to provide information, but also to more effectively direct and harness the public's desire to help. Training municipal communications teams in crisis communication for comparable events would help strengthen their capacity to engage effectively with the public. Strengthening the ICS communication function would also facilitate more effective communication.

10.1 Social media – A double edged sword

Although social media helped to keep people informed and connected, there were challenges. Many of those on the frontline, particularly volunteers, used WhatsApp Messenger to communicate with one another, as did members of the public. Both Knysna's and the GRDM's communication teams used social media as an information source and to disseminate information. Facebook was another important source of information. However, social media also added a further layer of complexity. In addition to misinformation, official communication was confusing initially, as the status quo was changing constantly, and posts did not include times; this made it difficult to determine which information was most up to date.

This research suggests that the authorities have yet to really harness the power of social media and are behind the curve compared to prominent influencers. However, social media is an increasingly central dynamic in emergencies, in South Africa and internationally. It is therefore important that authorities proactively engage social media platforms, both because they represent a powerful tool and because

they need to influence the narrative to counter its more negative aspects, such as misinformation. Analysis of social media use during the Knysna Fires provides insight into how authorities can engage more prominently.

Key point:

Social media is becoming an increasingly important dynamic in disaster response; one that the authorities must engage with in order to remain current. This is particularly important given the potential for both intentional and unintentional misinformation.

10.2 Understanding how people use social media – A Facebook example

Recent research (Lendrum, 2019) provides insight into ways of better harnessing the potential of social media during disaster incidents. The research examined how people engaged on one influential Facebook page – the *Knysna Fires 7th of June* – during the incident. By late 2018, the group had received 49 080 likes and 52 105 followers and it was an important source of information both during and after the incident, providing a platform to mobilise resources to assist families affected by the fires.

The study extracted 8 770 posts for the period between the 7th and 11th June, from which 682 (one in every ten) were examined in-depth. The study broke the posts into two phases: the first for the period between the 7th-11th of June (348 posts) and the second for that between the 12th June-12th July 2017 (334 posts). The messages posted on the group were sorted into four main categories:

- information-related;
- action-related;
- emotion-related; and
- opinion-related posts.

The messages under each category were also sorted into five format types: content consisting only of text; only a photo; or only a video; text with a photo; and text with a video.

The findings show that people responded more to information-related posts, as reflected in the number of Comments, Likes and Shares (Table 8). The patterns are similar for both Phase 1 and 2, but in the recovery phase there was a slight shift towards posts coordinating action.

Table 8: The popularity of different types of messages.

Description	Phase 1	Phase 2
Most commented message: Sharing information	169 Comments	182 Comments
Most reacted to message: Sharing information	1 600 Likes	3 600 Likes
Most shared message: Sharing information	1 400 Shares	
Most shared message: Coordinating action		670 Shares
Average times a message was shared	13	13
Average comments in response to a message	4	3

Average reactions per message	20	43
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Source: Lendrum, 2019

The findings also show that although most posts were text only, people responded more to content, including a visual component, with popularity determined by the number of comments and shares per message (Figure 17). In Phase 1, most messages (84%) were text, but those receiving the most comments and shares were either videos (42%) or photographs (38%). In Phase 2 posts with a visual component remained most popular, but particularly photographs accompanied by text (43%), or photos alone (38%). The content, however, suggests that this was because people had questions about the photos and videos without a text explanation.

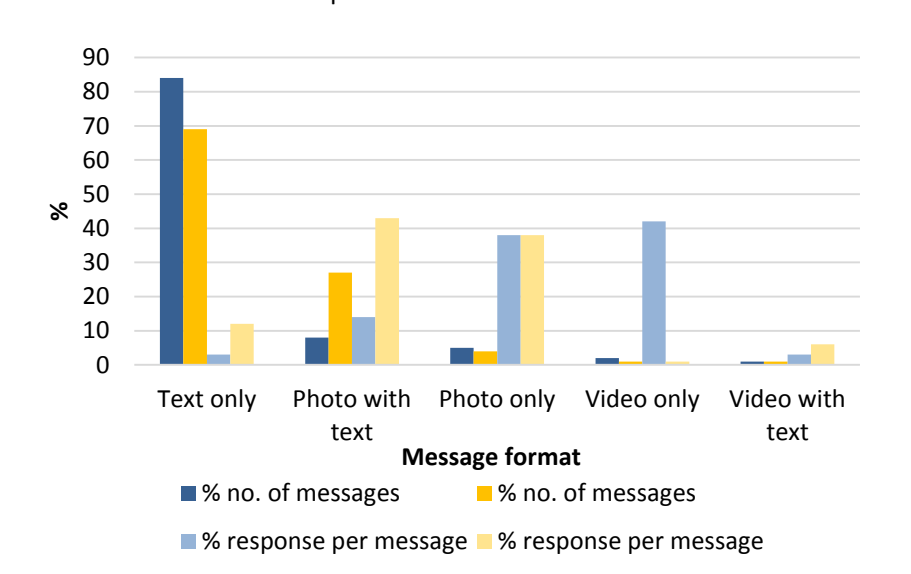


Figure 17: The popularity of different message formats. Phase 1 is shown by the blue bars, and Phase 2 by the yellow bars. Although text messages were the most common, people responded most to messages comprising a visual component. Source: Lendrum, 2019

This research suggests that the content and format of social media posts, on Facebook at least, can be targeted and made more useful and appealing for users. This is important where social media is used as a tool to receive and disseminate information and suggests ways of improving the reach and effectiveness of social media posts.

Key point:

Social media provides a useful tool for sharing information during disasters. In Knysna, Facebook users predominantly sought information and responded primarily to posts with a visual element. This suggests opportunities to target package information to reach a wider audience.

10.3 Twitter as a tool during and following the fires

Other research examined how Twitter was used during the event, again with a view to identifying lessons for improving crisis communication (Schoonwinkel and Cornelissen, 2019). That research examined 713 000 Tweets sent during and following the event, extracted using key words, from Twitter's global record for the period between the 6th and 14th of June 2017. The analysis looked at the

key role-players and influencers and the types of communities or conversations around topics. It shows that non-governmental role-players were most prominent in the Twittersphere.

Figure 18 shows the primary Twitter accounts discussing the Knysna Fires. The top right shows that users who often tweeted and were retweeted, indicating accounts that were critical sources of information. The top left quadrant contains users that tended to retweet other users' tweets without gaining much traction, while the bottom right quadrant contains users who did not tweet frequently but retweeted a great deal.

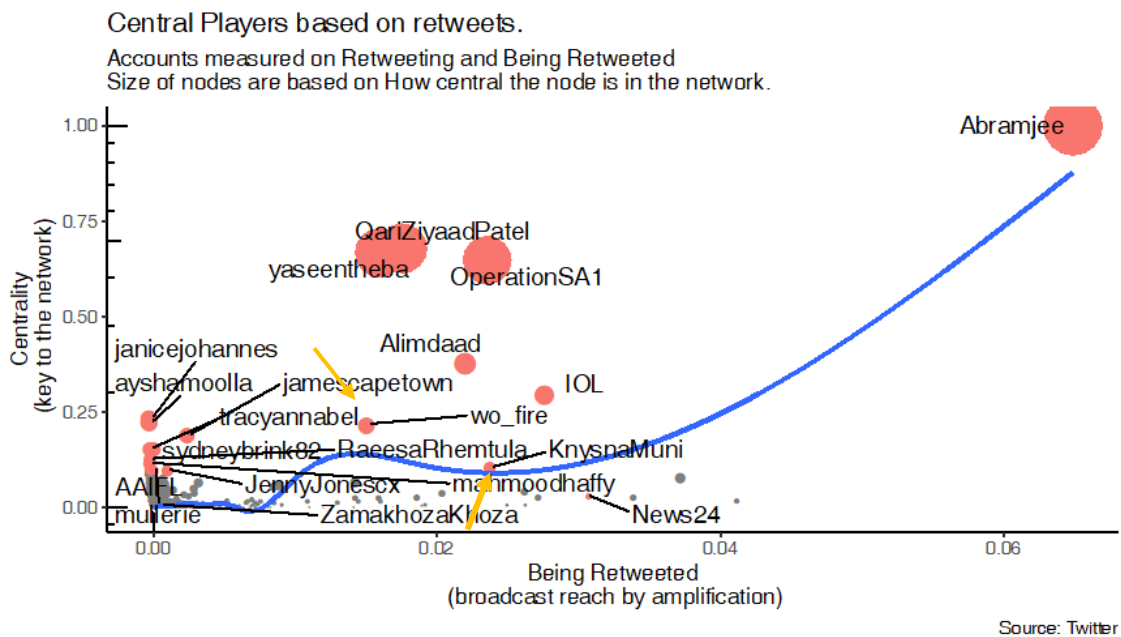


Figure 18: The prominent Twitter accounts discussing the Knysna Fires. An account's 'centrality' is determined by the number of tweets that a user posts relative to the number of tweets mentioning their account. Source: Schoonwinkel and Cornelisson, 2019.

There were several active accounts, including individuals and organisations involved in relief efforts, such as Al Imdaad Foundation, news media such as News24 and IOL, role-players such as WoF and members of the public, as well as Knysna Municipality's Twitter account. However, by far the most prominent was journalist Yusuf Abramjee's account, which also represented the humanitarian assistance organisation Al Imdaad Foundation. Al Imdaad Foundation was additionally represented by Qari Ziyaad Patel and had its own account (Figure 18). WoF and Knysna Municipality appear (the yellow arrows) but are much less visible, probably because they have a smaller audience and were not promoted by larger accounts.

Figure 19 identifies 'communities' discussing the incident, and shows once more that the independent key players, such as Abramjee, QariZiyaadPatel and OperationSA, were much more central than the official channels. The key players amplified the call for donations and relief efforts regarding the disaster by personally contributing to the discussion. Unsurprisingly, discussions revolved primarily around relief efforts, although the fires and evacuations were also discussed. The discussion around the

evacuations revolved mostly around asking people to help with evacuations, or news regarding the evacuations.

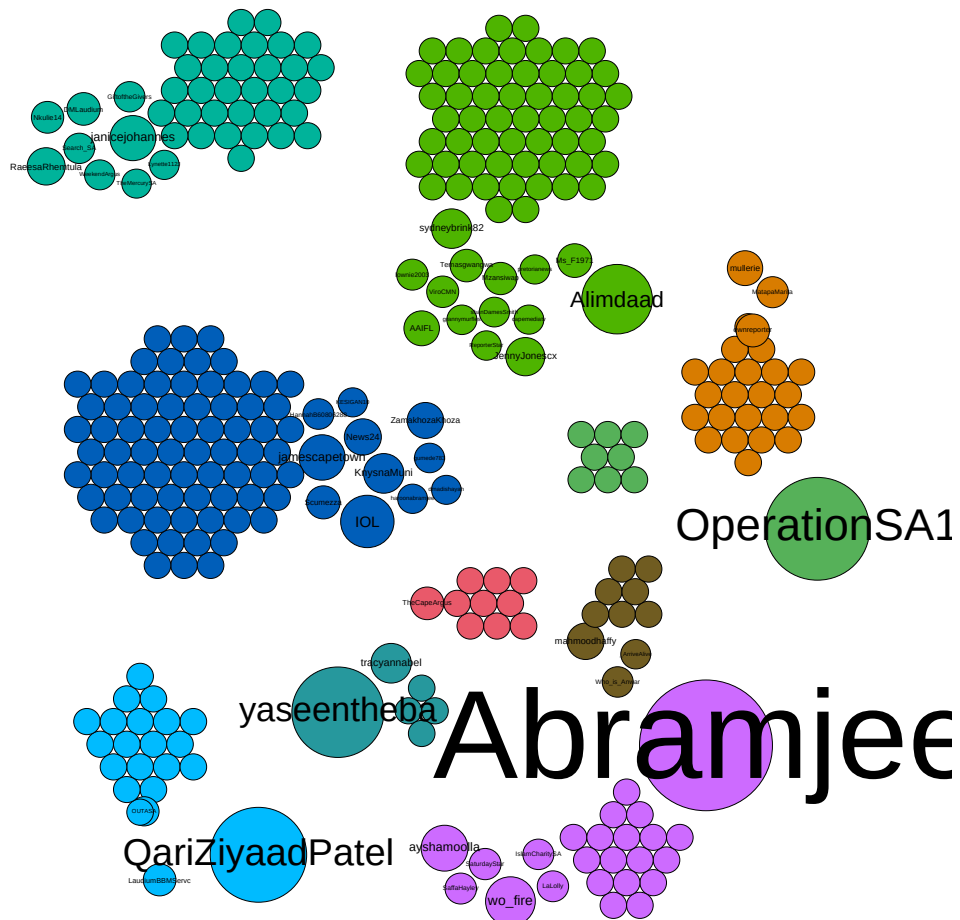


Figure 19: The plot identifies ‘communities’ or parties that predominantly interact with each other and shows the largest and most relevant communities discussing the event. The colours show the different communities, while the size of the circles shows an account’s centrality or influence over communities.

Overall, the analysis shows that NGOs, and specifically those concerned with relief, had a far higher profile on Twitter than official sources. Knysna Municipality was represented, as was WoF, but their tweets did not have the same visibility or traction.

The emphasis on relief was largely due to the activity of a handful of very active, influential accounts that dominated the conversations. These amplifiers have many followers, and by retweeting tweets were able to enlarge the discussion around this issue. By doing so, they undoubtedly played an important role in mobilising the public to donate, but as discussed earlier, this was not entirely beneficial to the response. This suggests that authorities need to communicate clearly and as early as possible regarding the need for assistance. These influential users could help to get the message out and to moderate public action.

Key points:

The analysis suggests that the authorities have yet to harness the power of social media and are behind the curve compared to prominent influencers. Tweets on the Knysna fires focused predominantly on humanitarian efforts because a small number of influential relief-oriented accounts shaped the conversation. Although the Knysna Municipality and WoF were both active, they did not have the same visibility and traction, primarily owing to their smaller number of followers.

The findings suggest that official sources can increase their visibility by proactively identifying and engaging these 'influencers' in their preparation and planning, and obtaining their assistance in amplifying warnings and information during and following disasters.

Lessons: Improving communication

The research highlights the importance of effective communication during disasters. It is critical that the authorities communicate with members of the public effectively, as consistently and as early as possible. This is not only essential to keep them informed and safer, but also to ensure that the public is aware of their needs and requirements, and how they can best help.

Social media platforms represent a powerful communication tool, but the authorities have yet to harness them optimally. This is necessary not only because these platforms represent a powerful tool to engage the public but also because the authorities need to counter negative aspects, such as misinformation. Such engagement need not be confined to crisis communication during incidents; social media also provides a medium to interface with the public during and after events, when it provides opportunities to educate, organise and keep people informed.

It is interesting that Facebook and Twitter appear to have played quite different roles during the incident. Both were used to mobilise resources, but the 7th June Facebook page also shared information, while Twitter influencers focused on donations and relief. This may be because the Facebook Page was established and curated by locals, while Twitter users were mostly spectators and remote from the incident. This suggests that depending on the prominent users, social media platforms could be used to target different audiences and for different ends.

The analysis also provides some insight into how the authorities can boost their social media presence and disseminate information more effectively – although these need to be explored further. One way is to making posts more visual. The other is to pre-emptively identify and elicit the assistance of prominent influencers to improve the visibility of messages and official accounts. As with other aspects of crisis communication, it is critical that official communications teams engage as early as possible to proactively shape the conversation before it gets away from them.