

Review Paper

Hospitality Emergency Management and The Dirty Twelve: A Dozen Reasons for Failure

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Abstract: The hospitality industry is highly vulnerable to emergencies and disastrous events. Related studies show that this industry reflects a lack of preparedness in crisis situations. Efforts should be well planned and organised under normal conditions rather than unexpected phenomena. This paper aims to shed light on issues related to emergency preparedness and responses to man-made crises and natural disasters and lists twelve main failures when dealing with uncertainties. The hospitality industry needs to prevent accidents with effective emergency preparedness and be prepared to overcome the aftermath or minimise the effects. Using secondary data from books, journals, and previous studies, this study illustrates new methods regarding the role of emergency management in the hospitality industry and presents twelve failures in dealing with uncertain events. The results of this study expound that by avoiding the dirty twelve, the hospitality industry could mitigate negative impacts. Finally, the importance of good planning efforts, organised personnel, and sufficient funds will clear any ambiguity in saving properties and lives.

Keywords: Hospitality, emergency management, Dirty Twelve, Failure Dozen.

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Introduction

Emergency management has received considerable attention from researchers in recent decades; exploring the old cave-man method of dealing with disasters and how the present and next generations cope with disasters by preparing in advance, innovating new methods in response and learning from experience. It is essential to understand the history of emergency management, defined by Haddock and Bullock (2006) as a discipline that deals with risks and risk avoidance. Emergency planning is the approach in dealing with disasters driven by disaster assessment and risk reduction (Perry & Lindell, 2003). Thus, effective planning is the most important factor required to be well prepared for a crisis (Cavanaugh, Gelles, Reyes, Civiello & Zahner, 2008).

In his studies, Faulkner (2001) finds an increasing number of disasters harming the tourism and hospitality industry. As an unexpected phenomena (Haddow & Bullock, 2006), these disasters threaten the security of any destination (Coyne, 2011). Santana (2004) asserts that the hospitality industry is highly vulnerable to disasters, internal or external (Henderson & Ng, 2004), as a result of the inseparable relation between guests and the employees of the tourism product. In addition, hospitality and tourism scholars have also studied the impact of emergency management on hotels (Kim, Chun & Lee, 2005), restaurants (Tse, So & Sin, 2006), travel agents (Lovelock, 2003), and airlines (Gillen & Lall, 2003).

In his Disaster Management Framework, Faulkner (2001) identifies the most important factors when dealing with crises and emergencies. His six phase model proposes the need for worthy information and a good communication system, including coordination between all organisations and a clear authoritative command. Other necessary steps include setting training standards to learn from previous events, creating effective crisis communication systems, improving disaster preparedness and providing the necessary health and medical supplies and emergency teams.

The term “Dirty Twelve” comes from response failures following disaster occurrences which point to a variety of systematic problems. Lack of effective disaster management and response teams made up of civil and military components causes decoupled commands and amplifies coordination and communication difficulties (Drabek & McEntire, 2003).

The purpose of this paper is to shed light on new methods such as exploring existing literature of emergency management to explain factors affecting responses to a disastrous event, and failures causing serious problems to people, destinations, and organisations, as well as hospitality management.

Literature Review

Hospitality Emergency Management

Existing literature on emergency management has focused on the hospitality industry's vulnerability to internal and external disasters in recent decades (Santana, 2004). Disasters are increasingly becoming a part of the hospitality industry (Goodrich, 2002) as they affect the industry's stability, directly or indirectly (Henderson, 2002). Referring to the inseparable relationship between the employee and the guest, Henderson and Ng (2004) asserted that tourism and hospitality services can be easily affected by disastrous events, internally and externally.

Paraskevas (2006) highlighted that emergency management is an important component of the hospitality industry. Emergency management could be defined as risk avoidance and dealing with disasters accurately (Haddow & Bullock, 2006). Practitioners studied the effect of emergencies on hotels (Kim *et al.*, 2005) and restaurants (Tse *et al.*, 2006) to better understand the importance of avoiding disasters (Haddow & Bullock, 2006). Faulkner (2001) emphasised that managers often cannot identify the characteristics of disasters before the event occurs; however, they can plan proactively to reduce the effects of such events.

In the last few decades, we have witnessed a wide range of natural and man-made disasters affecting the hospitality industry, for example, bird flu in 1997, September 2011, SARS in 2002, the Northeast blackout in 2003, the Gulf War in 2003, United Kingdom foot and mouth disease outbreak in 2001, the 2004 Tsunami, Hurricane Katrina in 2005, Amman bombing in 2005 and London bombing in 2005. These calamities encouraged scholars to study the various effects of such disasters on the hospitality industry. Israeli and Reichel (2003) studied its effects on hotels, while the study by Green, Bartholomew & Murrman (2004) focused on restaurants.

According to World Tourism Organization (1998), "planning is meant to prevent the triggering of any disaster and regulate its impact through changes to the physical site of tourism infrastructure reducing the likelihood of a disaster becoming a disaster". Planning for emergencies should consider several internal factors such as collaboration, communication, and control. However, the most important internal factor is the management's commitment in adopting and developing an emergency management plan, which will function as a strong guide and update messages to be communicated before, during, and after the crisis (Faulkner, 2001).

Cavanaugh (2006) also asserted that planning is one of the most important parts when dealing with disastrous events. Indeed, efficient planning is vital in gaining control over the existing disasters (Fink, 1986). Ellis and Subramaniam (as cited in Coyne, 2011) mentioned the need for efficient training to understand the effects of events and to deal with them professionally. In their research, Bach and Pizam (1996)

asserted the need for hotels to cooperate with the police and fire departments as well as local authorities.

Fink (1986) also reiterated that efficient planning plays an important role in emergency management. He added that planning for emergencies is very important in order to control an existing event. In addition, it is a technique to avoid disasters such as hotel fires, and demonstrates the intention to recognise crisis warning signals. Hotels have been categorised as high-risk buildings, especially for fires, due to the presence of highly flammable materials and the higher chances of smoke and fire spreading to the rest of the building or even neighboring buildings (Hassanien, Dale & Clarke, 2010).

Racherla and Hu (2009) developed a framework which mentions the importance of knowledge management in hospitality emergency management. In their work, the authors found a lack of trust between practitioners which prevented knowledge sharing. Another problem that is evident is the scant level of preparedness for the next event (Henderson, 2008). Among many internal factors, scholars found that the management's commitment to develop the emergency plan is very important as well as the need to update and evaluate such plans to ensure the continuity of work before, during and after the disaster (Faulkner, 2001). A learning tool which helps the hospitality business to recover after the event is equally important (Paraskevas & Arendell, 2007; Santana, 2004).

The Dirty Twelve: Dozen Failures

In planning for emergencies, several internal factors such as collaboration, communication, and control should be taken into consideration. However, the most important internal factor remains to be the management's commitment to adopt and develop an emergency management plan, which will become a strong guide and update messages to be communicated before, during, and after the emergencies (Faulkner, 2001). The Dirty Twelve: Dozen Failures are explained below.

1. Lack of efficient communication

Effective communication is one of the main elements in any emergency response to a disaster. The lack of timely communication between hospitality stakeholders and local authorities coupled with insufficient accurate information regarding the impact of the event will harm the emergency response. Furthermore, data communication and knowledge sharing about decisions are critical to the industry and the situational awareness (Beaubien, Baker & Holtzman, 2003; Endsley, 2000). In addition, effective communication will enhance other crisis managerial tasks such as coordination and decision making. However, a lot of communication does not necessarily mean effective communication (Hartel & Hartel, 1997).

Regardless of the control and command protocol introduced by the new national response plan, the operations during Hurricane Katrina's aftermath faced at least four separate commands (The White House, 2006). This prevented effective communication, resulting in cloudy and conflicting responses in dealing with emergencies and duplication of tasks (Knauer, 2005).

2. Poor coordination plans

Scholars distinguish communication from coordination by describing the differences between them. While communication relates to the movement of information between individuals and teams to establish situational awareness, coordination relates to movement of assets in an efficient manner (Gheytanchi, Joseph, Gierlach, Kimpara, Housley, Franco & Beutler, 2007). Efficient coordination is dependent on effective communication, as well as training, resource availability, task ability and decision making (Freeman & Serfaty, 2002). Endsley (2000) explains that poor coordination plans are mainly caused by ineffective training, operational errors, external influences and centralisation at the command level.

3. Ambiguous authority

One of the most important things in dealing with emergencies is to know who is in charge. Otherwise, it will be futile to coordinate efforts. It will create a push-and-pull effect where efforts to deal with emergencies begin before waiting for responses from other agencies (US House of Representatives, 2006). Ripley (2005) noticed a series of missteps by the the local and federal authorities in response to Hurricane Katrina with a strong focus on compulsory factors rather than the necessary, which is, spot evacuation. Furthermore, there was no "rush plan" or "plan B" to fill in gaps such as identifying the responsible parties to assist people with disabilities who needed a special evacuating procedure in the case of emergencies (Ripley, 2005).

4. Who is in charge

In the aftermath of a disaster, saving people's lives and properties is priority. 'The right person in the right place' policy should be adopted to identify tasks and responsibilities for everyone dealing with the disastrous event. Ripley (2005), in a public opinion poll, found that 52% of Americans blamed the government for the poor response to Hurricane Katrina. Different parties will start blaming each other to avoid legal action against them (Tumulty, 2005). Organisational learning from the disasters should be applied directly and quickly in its aftermath because organisations cannot predict the next disaster. Communications, collaborations and requests should be documented to identify responsibilities and accountabilities.

5. Counterterrorism vs. disaster response

Natural disasters and terrorist attacks cause equal harmful damage to destinations (Wisman, 2012) but the response levels in some disasters were found to be not satisfactory (Young & Borenstein, 2005). The imbalance in budgeting for disasters weighs more in favour of counterterrorism than natural disasters in the last decade. Young & Borenstein (2005) rightly pointed out that the United States budget for counterterrorism was 90% (\$1.1 billion USD), compared to 10% (\$180 million USD) for natural disasters, from the \$1.2 billion USD dedicated for U.S. disaster preparedness.

6. Lack of training

Sufficient training and systematic preparation of standards for disaster response are very important for decision makers to identify disaster managers. Managers with no experience in disaster management are not able to manage emergency responses and will be blamed for their failures. Training should be conducted for all potential participants in emergencies, especially first responders and emergency response commanders. Irrespective of the funding and training programmes that are available, the focus must be on training and learning rather than qualification (Jacobs, as cited in Gheyanchi et al, 2007).

The International Association of Emergency Managers (IAEM, 2006) and the Emergency Management Accreditation Program (EMAP, 2004) certify emergency managers based on criteria such as three years' experience in emergency responses, possession of a bachelor's degree, 200 hours of training, contributions to the emergency field, passing written scenarios, and an emergency response exam (IAEM, 2006).

7. Learning lessons

In the aftermath of disasters, scientists and practitioners focus on the lessons learned from the disastrous events and subsequent training exercises. Future responses dealing with disasters will be ineffective if managers avoid using knowledge management approaches. Emergency response organisations should allocate sufficient financial support and human resources to learn lessons and develop systems in order to mitigate the effects of future disasters. There is often limitation in knowledge sharing and usable information (Weber, Aha & Becerra-Fernandez, 2001). Emergency managers should organise a multi-organisation disaster simulation in order to understand the vulnerabilities in the event of a disaster. Weber *et al.* (2001) suggested a five-step learning process: lesson collection, verifying the lesson accuracy, lesson storing, lesson dissemination, and lesson reusing. Unfortunately, this learning process is seldom used by decision makers, as they face technical problems, insufficient funds and role ambiguity, which hamper learning lessons from previous disasters (Tetlock, 2005; Wilson, 2002).

8. Disintegrated performance assessment

Coordination between training and evaluation is not easy when applied within emergency teams, especially when developing education techniques in collaboration with government agencies. Scholars who study emergency response argue that this learning system should be developed and integrated by disaster experts and researchers (Flin, 1997; McLaughlin, Doezema & Sklar, 2002). This system is very similar to the American emergency management system which fosters collaboration amongst local state agencies such as the police, fire department, and emergency medical technicians. If the emergency is bigger or more worse, the state-level teams will be supported by the federal government and U.S. Army and command will be transferred from the state to federal agencies (Mendonca & Wallace, 2004).

9. The geography of race and poverty

Kleinberg (2003) highlighted that the geography of race and poverty plays an essential role in emergency management responses to disasters. He observed that the Okeechobee Hurricane in 1928 and Hurricane Katrina were similar in that black communities were affected and resentment stemmed from the racial inequity and poverty in response to the degree of support from the local and federal authorities. Poor neighbourhoods suffer from a lack of resources and transportation. This creates a fertile environment that amplifies the effects of disasters. Furthermore, there are insufficient evacuation plans as these depend on the available services and resources (APA, 2003). The poor and minority groups should receive more attention at the resolution stage especially, older people and those with disabilities.

10. Chaos and rumours

Chaos and rumours should be avoided when dealing with emergencies. Allport and Postman (1947) studied the effects of rumour and chaos on panic flights and outbreaks as a real threat in disastrous events. Thus, the mass media needs to be engaged as much as possible to carry out their work responsibly. The mass media plays an important role in managing rumours about activities such as rape and murder. Some negative perceptions of the actual events are sometimes brought about by particular behavioural and cultural backgrounds (Freimuth *et al.*, 2001).

11. Individual and community preparedness

The lack of individual and community preparedness will further harm any emergency response as they should be able to at least support each other and make up for the

shortage of rescue and medical support. Lukes (2005) argued that people should help each other before or in case of unavailable governmental aid.

12. Disaster mental health professionals

Professionals play the most important role in emergency preparedness and response. (Mitchell, 1983) proposed the Critical Incident Stress Debriefing (CISD) professional program for emergency responders and military survivors. Unfortunately, this program failed in terms of efficacy (Gist & Woodall, 2000). Any disaster recovery program should include adaptive coping and problem solving (Young, 2006). Furthermore, it is important to understand the required basic needs in order to provide the necessary health services when dealing with disastrous events (Beutler, Reyes, Franco & Housley, 2006).

Faulkner (2001) commented that there are very few studies that focus on disasters and crisis management within the hotel industry. The essential needs for crisis management are to increase safety and security awareness among practitioners, managers, and stakeholders (Chan & Lam, 2012), improve existing emergency response plans and increase training and equipment resources (Kano, Ramirez, Ybarra, Frias & Bourque, 2007). Fox, White, Rooney & Rowland (2007) found a lack of emergency response plans focusing on people with disabilities, which highlights the importance of revising the plans to give priority to this group when performing an evacuation. Furthermore, persons with disability should be a part of the emergency response team.

Kapucu and Khosa (2013) identified the main factors in emergency preparedness plans and demonstrated that there is a lack of leadership and coordination at the level of preparedness. Racherla and Hu (2009) in their study developed a framework about tourism that integrates effectiveness with knowledge management when planning and dealing with disasters. They stressed that organisations respond to disasters in relation to their own agenda. In addition, the lack of resources and trust among them prevents knowledge sharing between these organisations that are often in competition with one another. Furthermore, Henderson (2008) found an insufficient level of preparedness and planning for the next disaster.

METHODOLOGY

This study reviewed the existing literature on hospitality emergency management and the “Dirty Twelve” – dozen reasons for failure when responding to disaster. It proposes emergency models and a theoretical framework explaining the relationship between the “Dirty Twelve” and effective/ineffective emergency management (Figure 1). To ameliorate the discussion, this conceptual paper used secondary data from the results of previous studies, books and journals to interpret existing concepts (Chaudhary, 1991).

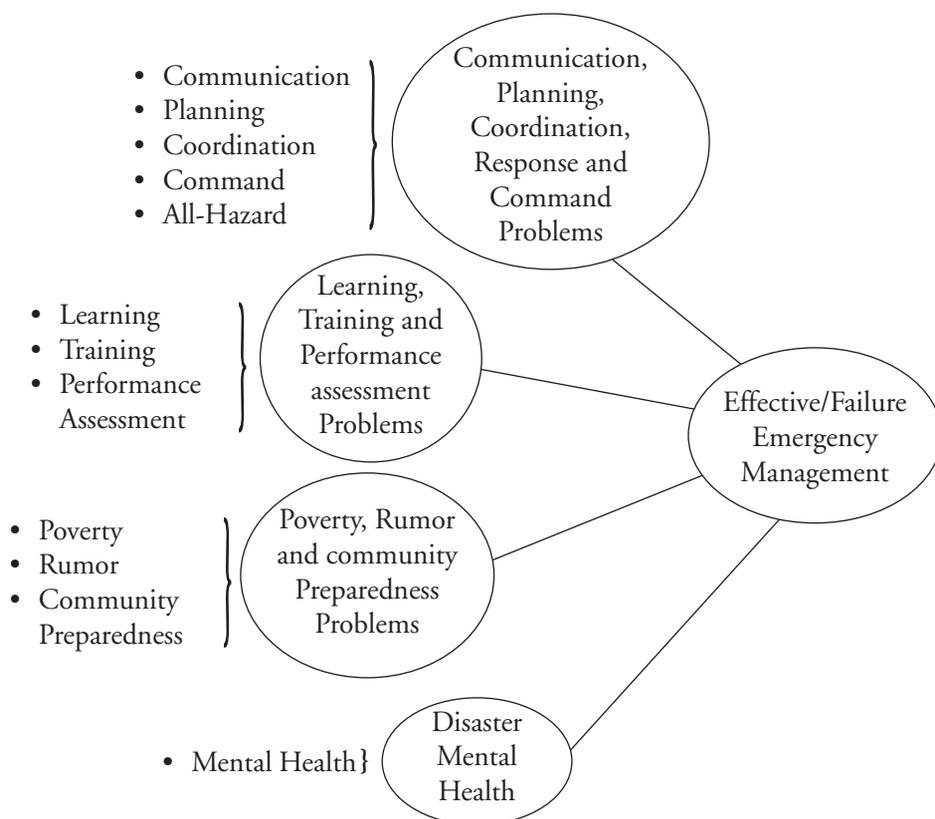


Figure 1. Theoretical framework

DISCUSSION

Faulkner (2001) found that very few studies focus on disasters in the hospitality industry. Scholars emphasise the importance of updating written emergency plans, as well as ensuring sufficient equipment and training programs (Kano *et al.*, 2007), and increasing awareness among managers (Chan & Lam, 2013). In the same context, Rooney and White (2007) observed that there is a shortage of emergency plans, and that there is a need to update emergency plans to give priority to persons with disabilities when evacuating during a disaster. They suggested that the emergency response committee should employ persons with disability within the team. In studying factors affecting emergency preparedness plans, Kapucu and Khosa (2013) found a weakness in leadership and coordination at the preparedness level. Drabek (1995) examined the level of emergency preparedness and evacuation planning in 185 tourist

businesses to determine the effect of planning on preparedness, factors that stand in the way of preparedness, and lessons that could be learned. He finds that planning according to threat and actions that can be reasonably executed by the authorities is incorrect; instead, planning should be based on what could potentially happen.

A number of papers have been written on how the hospitality and other industries mitigate the effects of disasters. Researchers suggest several models to deal with such events. Evans and Elphick (2005) suggest two crisis typologies with regard to the way in which they develop: 'Cobra' which relates to a sudden event such as the Amman bombing which comes as a shock forcing a defensive response that rely on known and trusted agencies, and 'Python' which relates to recurring disasters such as tsunamis caused by poor management or high costs forcing a bureaucratic response where the crisis is not recognised and where recognition and response for the crisis could be negotiated (Figure 2). To minimise the negative impacts of a crisis, efforts should mitigate the effects of such events even before they take place. In his model, Fink (1986) explained the need to recognise signals. The disaster moves from the prodromal to acute stage causing damage to the destination, and fluctuates in parallel with the organisation's preparedness level.

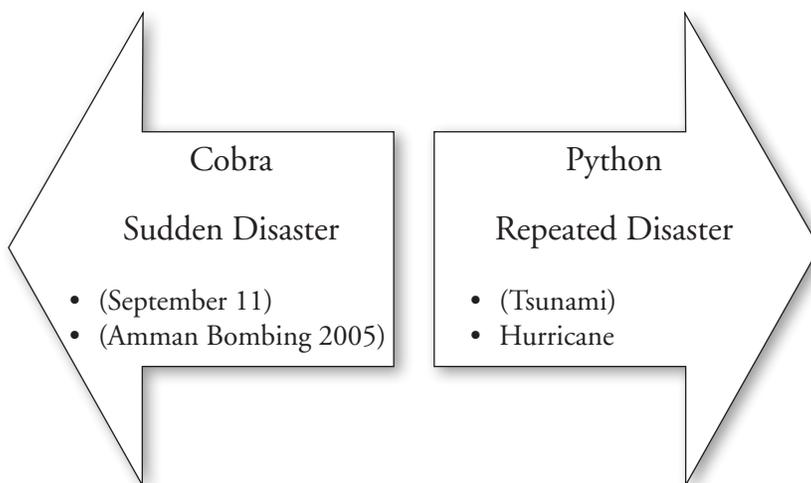


Figure 2. 'Cobra' and 'Python' typologies. Adopted from Evans & Elphick, 2005

Fink (1986) proposed a four-stage model to deal with crisis emphasising that efforts should focus on mitigating the effects of disasters and saving lives and properties during the emergency stage. Furthermore, it is important to immediately overcome this

disaster and resume essential services whilst planning for the next event. In addition, evaluation in the resolution stage will be vital to recover and return to normalcy (Table 1). Gheyntanchi *et al.* (2007) attempted to explain emergency management from a psychological point of view. They argued that for a psychologist, the final stages of emergency management treat the trauma, rather than prevent it. It is also important to study emergency management from all aspects: planning, communication, response, relief and recovery (Jacobs, 1995).

Table 1. Disaster life cycle models

Robert's (1994)	Fink's (1986)	Faulkner's (2001)
1. Pre-event phase		1. Pre-event
	1. Prodromal stage	2. Prodromal
2. Emergency phase	2. Acute stage	3. Emergency
3. Intermediate phase		4. Intermediate
4. Long-term phase	3. Chronic stage	5. Long-term (recovery)
	4. Resolution stage	6. Resolution

Adopted from: Ritchie, 2004

Caponigro (2000) argued that large organisations are more likely to have an emergency response plan compared to smaller ones, depending on their size and financial situation. Furthermore, Caponigro explained that with limited resources, emergency response planning is less important for small organisations, as they think that crisis will not affect them, or that they will be able to manage their business without such a plan. Organisations that have faced disasters before will be more likely to invest in and develop their own emergency response plan because they have suffered and learnt from its effects on properties and lives (Mitroff & Pearson, 1993). Faulkner and Vikulov (2001) and Ritchie (2004) proposed disaster responses to be categorised into six stages: *pre-event phase*, when planning for the disasters and trying to prevent or mitigate their effects; *prodromal phase*, the need to activate managerial plans when left with no choice but to face the disaster; *emergency phase*, when the disaster strikes and begins damaging the destination; *intermediate phase*, where emergency plans need to be implemented to help people and take care of their needs; *recovery phase*, where the long-term plans are applied and the affected destination is rebuilt; and finally in the *resolution phase* where crisis management is evaluated for improvements and organisational learning is undertaken to plan for the next disaster so that the effects can be mitigated better.

Carlsen and Liburd (2008) argued that the effects of a crisis increase when there is insufficient preparedness and planning for the next disaster, resulting in deeper impacts and a long recovery phase for the destination. Hospitality and tourism practitioners assert that emergency planners should focus on the prodromal stage of preparedness, planning, and prevention. The emergency management plans should be adopted, validated, and evaluated to ensure crisis prevention which enhances the ability to detect crisis signals and minimise losses. However, during the emergency stage, the focus should be on evacuation and communication to ensure immediate response and coordination to resolve the crisis. After the crisis, the focus should be on recovery and learning which helps businesses to recover and retain customers (B. Faulkner, 2001; Ritchie, 2004). Emergency management practitioners argue that efforts should be taken to mitigate the effects of crisis and disastrous events before the actual event to minimise losses. Fink (1986) clarified that recognising the warning signals of a disaster can be difficult. Damages to the organisation begin when the crisis moves from the prodromal to the acute stage. In this case, damages will fluctuate in parallel to the organisation's preparedness level. Similarly, Robert (1994) illustrates his four-stage crisis model that shows mitigation efforts and preparation in the pre-event stage while organised efforts to save people and property are carried out during the emergency stage.

The first five failures regarding communication, coordination and command led scholars to identify solutions in managing multi-organisational, personal, clinical, political and international teams. Some practitioners studied personality measurements (Bartone, Snook, Forsythe, Lewis & Bullis, 2007), while others looked at emergency response commander performance (Flin & Slaven, 1996). The other failures identified relate to learning, training and performance addressing ambiguities in training and lessons learned from previous events. Flin & Slaven (1996) studied the cognitive psychology of teams and individuals dealing with high-risk tasks and found negative outcomes of irrationality and decision-making biases when dealing with crises. Poverty, rumour and lack of community preparedness are failures related to effective crisis communication systems as well as improvement in personal and community preparedness, taking into consideration, the role of media, social characteristics and psychological theories (Gheytanchi *et al.*, 2007).

CONCLUSION

Emergency management combines the efforts of professionals, consultants and even the private sector. Effective communication and collaboration between government and non-government organisations is very important in overcoming and mitigating the effects of natural and man-made disasters. Gaining new knowledge

allows organisations to move from just reacting to an emergency towards a more comprehensive emergency response management encompassing all types of disasters. Emergency preparedness is a precautionary measure for disasters that provides all the indispensable resources needed in the case of a disastrous event. Frequent crises continue to harm the hospitality industry and failure to respond in any aspect could create difficulties. Therefore, it is pertinent that stakeholders create and improvise methods to deal with such situations. Central decision-making units that ignore the empowerment of field managers, late responses and bad coordination between government and local agencies, are major failures as well. Some of the failures encountered include ambiguities in training programs, problems in learning from previous events and insufficient performance assessment for improving disaster response efforts. Some other failures identified are not being able to address poverty issues, inappropriate emergency response systems, low personal and community preparedness and the ambiguous role of the mass media. In addition, trauma cases occur when there are insufficient and mishandled mental health services, especially in the handling of victims and their family members with respect to personal preferences, sensitivities, cultural considerations and religious backgrounds.

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