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SOCIAL UNREST AND DISASTER MANAGEMENT IN SOUTH AFRICA

OBČIANSKE NEPOKOJE A KRÍZOVÝ MANAŽMENT V JUHOAFRICKEJ REPUBLIKE

Kudzai S. MKWAKWAMI [1], Tererai NHOKODI[2] and Roman TANDLICH [2]

ABSTRACT:

South Africa is prone to many types of disasters and social unrest is intertwined with disaster management and disaster risk reduction framework in South Africa. In this context, social unrest can be both a disaster in itself, it can a symptom of an underlying vulnerability or pending disaster; and/or a combination of the two. In this article, the authors attempt to illustrate the theoretical and some practical implications of disaster management and risk reduction dimensions of social unrest in South Africa. The disaster continuum model and the expand-contract model of disaster management are applied to the examples of the protests which impacted healthcare services in the North-West Province of South Africa, the fees-must-fall protests; and to water and sanitation service delivery. Disaster management advisory forums and the catchment management forums are used as examples of multi-stakeholder platforms that apply to this context from a theoretical perspective. The authors attempt to explain their views of the connections between disaster management, business continuity and resilience of the social unrest examples. Further research will have to be conducted application of stakeholder theory of leadership and the principles of human resource management in disaster situations, e.g. crew resource management and the STEPPS approaches, to further develop the theoretical framework which is touched on in this article. Critical policy analysis of the Public Gatherings Act no. 205 of 1993, and relate legislation will have to be conducted from a disaster management point of view. This policy analysis will have to include evaluation of the links between the Public Gatherings Act and the Information Regulation System, as well as other related information sources.

KEYWORDS: *Multi-stakeholder platforms. Ad-hoc platforms. Resource persons. DMAFs. CMFs.*

INTRODUCTION

South Africa is an upper-middle income country according to the World Bank classification [1]. Political and social unrest is not a rare occurrence in the country. There is a history of the anti-apartheid protests and freedom marches before 1994. Under the democratic dispensation, political freedom and fight for equality among all citizens remain important drives of the protests. However, other issues have also become triggers for social unrest. Social unrest in South Africa today can be both a disaster in itself, it can a symptoms of an underlying vulnerability or pending disaster; and/or a combination of the two. The authors of this article only focus their discussion on the disaster management angle of social unrest and protests. No attempts or prejudice should be inferred about the validity or lack thereof of the social and other causes which lead or have resulted in social unrest/protests in South Africa. The views in this article do in no way imply any political agenda, no judgement on or about the health outcomes of the protest examples discussed on the population(s) involved. Rather the authors aim to outline the challenges that social unrest has on business continuity and fulfilment of the mandate of higher education institutions, local government and other relevant stakeholders.

Indication of the number of protests in South Africa can be obtained from the Incident Regulation Information System [2]. This database is operated and maintained by the South African Police Service (SAPS). Two types of relevant incidents are registered [2]: crowd management (peaceful) and crowd management (unrest). Unrest and peaceful incidents are often lumped together. The total number of the IRIS recorded incidents averaged 2.1 incidents per day between 2004 and 2009 [2]. The unrest type of incidents mostly involved

[1] Kudzai S. Mkwakwami, Pharmacy Student Division of Pharmaceutical Chemistry, Faculty of Pharmacy Rhodes University,P.O. Box 94, Grahamstown 6140, South Africa.
[2] Tererai Nhokodi and Roman Tandlich, Associate Professor, PhD., Division of Pharmaceutical Chemistry, Faculty of Pharmacy Rhodes University, P.O. Box 94, Grahamstown 6140, South Africa, tel.: +27 46 603 8825, e-mail: roman.tandlich@gmail.com.

service delivery protests between 2004 and 2009 [2]. The total number of incidents increased to a mean value of 2.9 incidents per day between 2009 and 2012 [2]. These statistics seems to indicate that the number of protests or social unrest incidents seems to have been on the rise in South Africa between 2004 and 2012. Since then, drivers of protests can, however, have still been linked to population's perceptions about service delivery, but also included the underlying grievances of the South African population [3]. Therefore the real or perceived lack of social development and high level of economic vulnerability of the workforce play a role in the protest and social unrest in South Africa [4].

In this article, the authors seek to apply the disaster continuum model and the expand-contract model of disaster management to the examples of the recent student protests and to water and sanitation service delivery.

1. METHODOLOGY

For this review, literature from the South African disaster management literature such as Jamba.org.za, Statistics South Africa, Google and Google Scholar was used to identify the models of disaster management which can provide at least partial explanation of the disaster management and social unrest in South Africa from the disaster management point of view.

2. DISCUSSION

The expand-contract model and the implications of social unrest in South Africa

In April 2018, violent protests erupted in Mahikeng, the capital of the North-West Province of South Africa [5]. The residents took to the streets and demanded the resignation of the provincial premier. Major roads have been barricaded, preventing traffic flow. Hospitals and clinics have been shut down and the Provincial Department of Health was unable to distribute medicines to its facilities. The situation in Mahikeng was classified as an internal social crisis from government's perspective. Disruption of the medicine supply can create a situation where public health is negatively affected. The severity of epidemics and management of chronic diseases can be compounded by the lack of medicines. Strategies to guarantee stability of medicines supply and to increase resilience of the pharmaceutical supply chain management must be developed. To achieve this, the stakeholder theory crisis leadership was applied to identify the key stakeholders which are relevant to achieving the resilience of the pharmaceutical supply chain management.

The South African Government and the Provincial Department of Health were identified as definitive stakeholders, the population of Mahikeng was identified as the dependent stakeholder and the healthcare professionals, who were working in healthcare facilities around Mahikeng, were identified as the a discretionary stakeholder. Crisis in the medicine supply chain management during the April 2018 protests constituted an acute stage of the crisis. Use of private healthcare facilities for the distribution of medications was suggested as a potential solution to maintain pharmaceutical supply chain management during the protests. Since the violent protests and unrest happens during the daytime, it might be a good idea that transportation and delivery of medicines happens in the night time for the duration of the strike until there is peace again.

The crisis above and the management follows the expand-contract model of disaster management, as all stages of the disaster management cycle were executed at the same time. Medicine supply in the North-West Province was further complicated by the financial crisis which the provincial health department finds itself in [6]. The principles of the healthcare provision in low-resource settings which was developed for various healthcare challenges by the World health Organisation should be applied here. The principles of human resource management under crisis conditions, which have developed and are aimed and preventing negative health outcomes should be explored and implemented in South Africa [7].

In 2015, South Africa experienced one of the biggest student protests in the country's history. The fees-must-fall movement started as a nation-wide mobilisation over social media and almost overnight pretty much all of the country's campuses were shut down. The student grievances included the lack of transformation of the curriculum at the HEIs, the burden of tuition and other fees, dysfunctional part of the academic project, etc. [8]. Academic activities at almost all HEIs in South Africa, and in the majority of the programmes taught came to a grinding halt [8]. The expand-contact model of disaster management applies here as the disruption of all academic activities placed the

HEIs in a position where all stages of the disaster management cycle had to be carried out at the same time. The critical infrastructure, e.g. expensive equipment and access to it had to safe-guarded, dangerous goods such as explosive gases had to be secured against tampering and potential explosions, police and private security guards had to be hired to restore or maintain security on the HEI campuses around South Africa.

Traditional platforms [9], used for communication at HEIs, proved to have limited effectiveness and new platforms/student representatives came to the fore [10]. This highly complicates the communication between university management and students protesters. The unpredictability of the events and developments became a clear disaster management issue. To maintain business continuity, universities modified their examination procedures (additional security measures at the entrances) were put in place, crisis communication channels were improved (the SMS database was updated with all staff and student numbers). It also became clear the legislative tool to run protest action, i.e. the Public Gatherings Act no. 205 of 1993, became inefficient, i.e. as an equivalent of the multi-stakeholder platforms outlined in sections 2-7 of the act could not be constituted [11].

Individuals or resource persons had to be identified and requested to assist in maintaining communication between the protesting students and university management. Critical policy analysis of the Public Gatherings Act no. 205 of 1993, and relate legislation will have to be conducted from a disaster management point of view. This policy analysis will have to include evaluation of the links between the Public Gatherings Act and the Information Regulation System, as well as other related information sources. The stakeholder theory of crisis leadership will have to be applied to this context to facilitate the development of novel disaster management protocols for future protests.

Disaster continuum model and the possible prevention of social unrest in South Africa

The average annual rainfall in South Africa has been reported to stand at around 495 mm in South Africa [12]. In 2014, the World Bank data indicate that the volumes of available freshwater resources stood at 828.72 m^3/year/capita in South Africa [13]. This is well below the World Bank threshold of water stress, i.e. 1000 m^3/capita/year [14]. As a result, South Africa can be classified as both water-scarce and water stressed country. The country's disaster profile has been well studied and the types of disasters relevant to the country's territory include droughts and floods [15]. Both types of the disasters have major implications on everyday lives and well-being of the South African population. Therefore input of all social strata is sought in dealing with the disaster management planning for floods and droughts.

This principle is reflected in the text of South African disaster management legislation, i.e. the Disaster Management Act no. 57/2002 and the Disaster Management Amendment Act no. 16 of 2015, as well as the South African Disaster Management framework of 2005 [15]. All these pieces of legislation were drafted to avoid the mistakes of the past and to prevent exclusion of any parts of the South African population from decisions that directly or indirectly affect them. As a result, the disaster management policy framework in South Africa is based on the tenets of cooperative governance and the widest possible participation of all relevant stakeholders in decision-making [15].

Disaster management advisory forums (DMAFs) are legislated in South Africa and constitute multi-stakeholder platforms which are aimed to serve hubs for two-way exchange of information and expertise among the disaster management stakeholders in the country [15]. In addition, DMAFs should to facilitate the inclusion of inputs of various stakeholders into disaster management legislation and into disaster risk reduction. By the same token, these multi-stakeholder platforms should provide space for the identification of best practices related to the various stages of the disaster management cycle in South Africa. Therefore DMAFs embody the participatory approach to disaster management and disaster risk reduction in the country.

DMAFs and their operating principles are mirrored in the management of water resources such as catchments, where catchment management forums (CMFs) provide an avenue for the interaction of the national, provincial and local government with non-governmental stakeholders [16]. Implementation challenges exist, but the number of CMFs constituted across South Africa has been growing recently, with focus on their role in Integrated Water Resource Management [17]. From a practical point of view, if CMFs play an active role in the IWRM, then all the voices and stakeholders relevant to

the water sector can be heard, i.e. principle of epistemic justice must form part of IWRM in South Africa. It can also serve as an effective platform to mitigation disaster outcomes of floods and droughts in South Africa.

Platforms such as DMAFs and CMFs play critical roles in the fulfilment of the mandate of the National Disaster Management Centre (NDMC) and its provincial/municipal counterparts, as well as the catchment management agencies and the Department of Water and Sanitation. Natural resources are important for the maintenance of livelihoods of the population in South Africa [18]. Indigenous knowledge and traditional environmental management practices have been in place for centuries and must be strengthened and integrated into government programmes, drafted and put in place to deal with the challenges of the 21st century such as climate change [19]. The nature of the ecological services which are provided by a catchment or water body to the surrounding communities, and the indigenous knowledge which can be used to deal with floods and/or droughts can be identified through the effective use of DMAFs and CMFs. In this way, sustainable management and development of natural resources can be achieved in South Africa. Thus DMAFs and CMFs constitute multi-stakeholder platforms. Involvement of these multi-stakeholders platforms in disaster management and disaster risk reduction can help optimise the execution of various stages of the disaster management cycle. Continuous engagement with communities and non-governmental stakeholders (NGOs) can assist government to execute all four stages of the disaster management in terms of the disaster continuum model, i.e. continuous updating and improvements in disaster management become easy to achieve.

In line with this, multi-stakeholder platforms also assist in dealing with underlying issues affecting disaster management practice in South Africa, e.g. collecting data and understanding the various vulnerability facets of the South African population. At the national, level, those facets have been characterised and studied. They include highly unequal income distribution [20], low savings at the household level and other gender imbalances [21]. As majority of the disasters in the world and in South Africa are local in nature, i.e. the immediately impact is felt by small communities and local municipalities. DMAFs and CMFs can be a vehicle for the collection of data on local impacts of disasters. One such gap in the provision and availability of data on microbial water quality in the public domain using the NGOs. NGOs would help fulfil this function, when local municipality does not have the capacity to perform the microbial water quality testing as mandated by legislation in South Africa [22].

NGOs can include qualified stakeholders such as members of the academic community of Rhodes University [22]. This type of NGO involvement originates from the mandate of higher education institutions in South Africa (HEIs) to conduct research on problems facing the country, e.g. due to the fact that it provides the possibility to transform/decolonise the higher education curriculum [8]. If possible the studied problems, i.e. HEI research topics, should also be the ones that affect the areas where particular HEIs are located, i.e. the problem of ventillated improved pit latrines which have been in use for decades/long time [23]. At the same time, HEIs should interact with the communities in their geographical areas and throughout South Africa at large through community engagement (CE), which is one of the fundamental pillars of the academic project at HEIs [24].

If this interaction is in place and is ongoing, then the disaster continuum model applies and information/measures can be implemented which apply to all stages of the disaster management cycle. All the information can be collected in a collaborative fashion and is then available to all stakeholders involved. In line with this tenet, CE takes on many forms at HEIs in South Africa. All of them must and do provide for a two-way exchange of information, development of new knowledge and beneficiation for both the HEIs and the communities who are involved in the CE projects/activities. Such exchanges and creation of knowledge is done equal consideration of all the relevant voices. Thus based on the principle of epistemic justice, disaster management and risk reduction solutions/necessary interventions can be targeted to highly specific conditions in a particular local context.

An example of this approach is the use of volunteer units for disaster management. These units are legislated in the context of the official disaster management system in South Africa [23]. Volunteer units have been identified a potential tool for the improvement of service delivery at local levels of government, where the breakdown in the service delivery has occurred [23]. By interaction between academics, NGOs and communities, the empowerment of

communities takes place. Their awareness of the underlying causes of disasters and the need to particular mitigation strategies can be improved. Theoretically this can lead to the decrease in the likelihood of protests and social unrest, especially in relation to water and sanitation service delivery by local government.

Volunteer units, in conjunction with DMAFs and CMFs, can be used to fill technical gaps and financial/logistical capacity shortages in disaster areas, e.g. in sanitation service delivery [23]. From a disaster management point of view, this is a disaster risk reduction measure which helps decrease the risk of outbreak of the sanitation-related infectious diseases. The use of volunteer units and similar platforms in the water sector and in IWRM originates from the possibility to manage novel Natech/complex disasters (designated as Natechs in further text). These are disasters where the hazard of natural original, but the disaster is triggered by human factors. Examples from rural and urban areas of South Africa include the following: the hazard can be the arid nature of the area, i.e. the area is prone to drought and primary water scarcity. The breakdown in water service delivery leads to secondary water scarcity or compromised hygiene, thus increasing the possibility of outbreaks of infectious diseases such as typhoid fever.

Recruitment of volunteers should take place from the local communities affected by disaster, they should be equipped with insurance and personal protection tools; and should ultimately become employable by local government to fill the technical and skills gaps capacities. Water and sanitation; and other service delivery aspects of the local government's mandate can be improved by the use of volunteer units. Sense of buy-in and ownership of the implemented solutions can be instilled in the participating stakeholders. This can in turn help improve the business continuity potential of the local government, as the probability of social unrest should decrease.

The risk factors is that the expectations of the community must be clearly managed and the false promises or impression by community members must be avoided at all costs. The local government officials must maintain ongoing and uninterrupted communication (links) with all stakeholders in this multi-stakeholder platform. This approach thus again apply to all stages of the disaster management cycle, i.e. it adheres to the disaster continuum model.

The volunteer units are not the only tool available for the addressing the service delivery problems in South Africa. Risk of Natechs has been present in South Africa for many years. As early as 2007, some local municipalities' roles in delivery of basic services, such as water and sanitation provision, were been "taken over" by rates payers associations [25]. Provincial governments have often been forced to step in and take over the running of district/local municipalities [26]. Non-governmental stakeholders (NGOs) are often the ones that take the lead in addressing the impacts of disasters. A recent example is drive by the NGO - Gift of Givers to drill new boreholes and restore the drinking water supply to the town of Sutherland in the Northern Cape Province [27]. At the same time, various stakeholders have driven campaigns that raised funds for the response activities, e.g. drought disaster fund which is managed/overseen by a national farmers' organisation [28].

The tools besides volunteer units are the ad-hoc multi-stakeholder platforms which are formed based on the common cause or interest and do not require a legislative foundation. Whether run as action research projects or as civic engagements, all these platforms provide a practical foundation for the solution of a problem which negatively affects the well-being of a community. The platform is formed by NGOs, who have the expertise to assist, and the community who are impacted and who know how to practically drive the implementation of an epistemically and culturally sensitive solution. The ad-hoc character and bi-directional involvement of vital stakeholders make a tools to help design local and targeted solutions for disasters in South Africa. Theoretically and if properly run, these ad-hoc multi-stakeholder platforms can provide solutions for Natechs, even in the context of the compounding factors such as climate change. Such solutions can be integrated into the framework of policies of the South African government. Framework is provided by the following policies: the Climate Change White Paper [29] and the recent tabling of the Climate Change Bill for public comment [30].

In the context of climate change, the South African Weather Service which is the official weather-forecasting government authority in South Africa has supported efforts for the development of some early warning systems around the country, e.g. the flash floods [31]. The relevant remoting sensing studies were also done, e.g. in the Western Cape Province of South Africa [32]. These types of early-warning

systems are in line best practices in the field of disaster risk management, risk reduction and crisis management.

Buy-in from communities, which are the target of the interventions in disaster management, is therefore of critical importance. In South Africa and Africa in general, it is often the stumbling block of the success of action research or community/civic engagement activities [33]. Reasons include that the target community might feel exploited or disrespected in the context of the research project. Cultural norms might be disrespected and/or not adhered to by the researchers, conducting the study. Both of these reasons, as well as any additional causes that might apply, can results in the lack of community buy-in into a project or community engagement. This in turn leads to the breakdown or lack of success of the ad-hoc or established multi-stakeholders platform in the context of the conducted research or intervention. Water and other natural resources are seen as assets in the African cultures. To further understand the cultural aspects of resource management such as IWRM and the scope of stakeholder participation in it, ethical implications of resource management in African continent is outlined in the next section.

CONCLUSION

Examples and theoretical analyses performed in this article indicate that both the expand-and-contract model and the disaster-continuum can be applied to the disaster management of social unrest in South Africa. Further research will have to be conducted application of stakeholder theory of leadership and the principles of human resource management in disaster situations, e.g. crew resource management and the TeamSTEPPS approaches, to further develop the theoretical framework which is touched on in this article. Critical policy analysis of the Public Gatherings Act no. 205 of 1993, and relate legislation will have to be conducted from a disaster management point of view. This policy analysis will have to include evaluation of the links between the Public Gatherings Act and the Information Regulation System, as well as other related information sources.

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