ACCIDENT AND EMERGENCY PREPAREDNESS IN SCHOOL SETTING: IMPLICATION FOR SCHOOL AND COMMUNITY COLLABORATION

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Abstract
Collaboration between school and community is important for protecting the health of school children especially through effective preparedness for cases of emergency and accidents which are common in school environment. This paper reviewed accident and emergency preparedness in school setting vis-à-vis its implication for school and community collaboration as well as the importance of school and community collaboration based on the collaborative model. The concepts of school accidents, emergency preparedness and the factors that could predispose students to accidents and emergencies particularly as imposed by the school environment were reviewed. It was thus suggested that close collaboration with community should be established by schools' owners. Community should collaborate with schools in the areas of funding and supplying of necessary information that could aid planning. Researchers should conduct studies on accident and emergency management in schools. Lastly, government should provide a legal framework that will encourage school and community collaboration.

Keywords: Accident, Emergency, Preparedness, School, Community, Collaboration

Introduction
Public concern over students' safety in school is on the increase (Perumean-Chaney and Sutton, 2013). Ensuring school safety has been identified as the most important problem facing the schools across countries of the world because of the diverse social health problems.

The problems associated with the fear of possible emergencies could be the reason many students reported that they sometimes felt unsafe at school (Rose and Gallup, 1999). It is worrisome that even in advanced countries of the world, attack on school or fatalistic unforeseen circumstances would have happened because the stakeholders got to know there was danger and management of the emergencies leave much to be desired.

The issue of safety of the environment is very crucial as students spend at least a half of their time in or around school environment and the phenomenon becomes worrisome when the surrounding of the school is accident prone. Many schools appear to be incapable of managing situations involving accidents whereby students sustain injuries. One of the most important reasons for the failure in the management of accident and emergency has been attributed to insufficient organizational capacity and unpreparedness of the organizations involved in emergency response operations (Kapucu and Van Wart, 2006). School being a social institution has been found to be responsible for meeting the educational requirements of the society (Arabaci, 2016). The required dynamic and continuous process in ensuring safety and educational continuity of a child could be initiated by the school, the community or jointly by both.

Numerous accident and emergency cases have been reported in various newspapers and documented by researchers. The onus thus rest on both school and the community to forestall future occurrence to ensure the safety of students while in schools. Baret (2001) and FEMA (2012) documented that school constitute a significant proportion of community population and accordingly have an obligation to ensure the safety of students, staff and sometimes community members by preventing accident or managing emergency situations. In view of the proneness of schools to unsafe situations, schools are expected to anticipate and prepare to respond to emergencies (Selekman, 2013). As a result, it behoves the community and the school to put in place structures that will enhance safety of school children.

In Nigeria, the continuous violent attacks make it mandatory for schools to do everything possible to protect their students from foreseeable harm, injury and death (Calisi, 2016). In the developed countries, sophisticated security arrangements are made for school environments through the use of metal detectors, security guards,

surveillance cameras, required 'check-in' areas and fencing around the entire school (Mowen and Parker, 2014). The preparedness to prevent attacks involves maintenance of rigorous security protocol buoyed by strict discipline policies to keep students in line and maintain safe campuses (Nicole, 2011).

The concept of school safety involves the protection involved in the entire gamut of movements of students from home to school, the time spent at school and the movement back home. The presence of gang, drug problems and terrorists in and around the school environment including other preventable threats could increase or decrease students' feelings of safety within the schools (Schreck and Miller, 2003). A scholar has identified that school safety has a significant impact on academic achievement (Duszka, 2015).In many schools across Nigeria, students are susceptible to encountering a wide range of safety issues from overt acts of violence and bullying to subtle intimidation and assault or to extreme incidents such as school shootings (Steinberg, Allensworth and Johnson, 2011) including secret cultist fatal clashes not to talk of outright insurgency such as the abduction of the Chibok girls which attracted international negative attention.

School Accidents

Accident could also be defined as an unpremeditated event resulting in recognizable damage. Accidents are complex phenomena of multiple causation which can be classified into two broad categories namely human and environmental. Accidents are also the major cause of death among persons aged 10-24 years (Parks, 2005). Accident is defined as an occurrence or a sequence of events which usually produce unintended injury, death or damage to property or an unexpected, unplanned occurrence which may involve injury (Park, 2005). Many of the factors responsible for accidents could be attributed to human factors such as age, sex, education, fatigue, sudden illness or lack of experience. Environmental and natural occurrence could also cause accidents resulting in injuries or damage to properties. This could occur due to certain conditions beyond the control of human beings. For example, a flash or lightning and thunder could result in injuries. Others will include flood, landslide, earthquake, tsunami, hurricane, tree felling among others.

The hazards confronting schools are numerous and vary across countries. Emergency situation ranges from natural disaster such as flooding or earthquakes to man-induced disaster like shooting, kidnapping, abductions or internecine attacks. School sports and playground activities are recognized as important means of promoting physical activities in children. However, both serve as a major predisposing factor in causing injuries in school. For example, Marchie (2002) identified the unkempt playground, the school farms, school laboratory and workshops as sources of accidents. Other sources of accidents in schools include the school building which may be in dilapidating form. Schools have the responsibility of providing enabling environment, which will prevent injuries from occurring in school compound from unmaintained school facilities and equipment (Abernethy, Macaulay, McNally and McCann, 2003).

Students sustain injuries in schools due to a variety of activities (Maitra, 1994). In Nigeria, records of school accidents are scanty and sometimes non-existent. This does not foreclose that accidents have been a major problem in the country's educational institutions most especially at the primary and secondary schools. The primary school level appears to be more susceptible to accidents because of the tender age of the children, and some other physical and physiological factors associated with their age (Emenike, 1989). Among school-aged children, unintentional injuries are the leading cause of morbidity and mortality (Lenaway, Ambler and Beaudoin, 1992)**.**

Causes of Accidents
Playground injuries have been identified as the major cause of injury among school children ages 5 to 14 (Maitra, 1997). There is correlation between majority of injuries and playing ground activities among elementary school students while organised sports, games and physical education classes account for the bulk of injuries among secondary school students (Miller, 1995). Aside playground injuries, condition of the classrooms can predispose students to accidents. For instance, Ihenacho (2001) discovered that most Nigerian classrooms lack good lighting control, the chalkboards reflect light that dazzle learners' eyes and poor sound control coupled with overcrowding and poor ventilation, these could cause accidents or emergency situations. Many accidents in or around school environment do result into injuries such

as fracture, dislocation and head injuries. Also, strains, sprains, contusions, abrasions and lacerations are mild forms of school injuries.

It is assumed that some factors are beyond the control of man. This assumption is however, applicable only when all necessary prudent measures have been taken to avoid injuries. Factors such as defective roads, speed breakers, poor lighting excessive speed, bad weathers and inadequate enforcement of existing laws are within control of human being and can be corrected or adjusted for the purpose of preventing accidents (Mgbor, 2002). Others are excessive use of alcohol and drugs, emotional tension, social pressure and taking of risks (Parks, 2005). Lack of supervision is associated with 40 percent of playground injuries. Children play without adult supervision more often on school playgrounds 32 percent of the time than public playgrounds (Sosnowska, 2003).

Emergency Preparedness
Preparedness could be described as the measures and policies put in place by man before the event occurs that reduces the damage which could have resulted from the event. Emergency preparedness could be defined as a planning stage where the individual, group of people or agencies decide on how they will respond to a given incidence or set of circumstances which may arise from accident or emergency situation. It is a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action in an effort to ensure effective coordination during incident response.

Emergency is defined as a situation which poses an immediate risk to life, health, property or environment (Mgbor, 2002). The possibility of a public health emergency such as a natural disaster, act of terrorism or disease outbreak in schools makes emergency preparedness a necessity. Many schools have witnessed different types of disasters of which many lives have been lost due to lack of emergency preparedness. Preparedness for disasters and emergencies at individual, community or organizational levels could be an effective tool in mitigating the growing incidence of disaster as well as ameliorating the impacts (Ejeta, Ardalan and Paton, 2015).

Many studies have investigated the effectiveness of professional responses to emergency events, however, there is paucity

in the literature documenting individual and community preparedness for emergencies (Liu and Robinson, 2013).

Emergency Preparedness in School Setting
Emergency preparedness in schools and communities across the nation is a process of preparing and developing skills and facilities for responding to potential emergencies. No school can claim that there is no potential responsibility for planning an adequate response for emergency. Adequate planning will establish fundamental policies, programmes, strategies, assumptions and a concept of operation spanning the direction and control of an emergency response. Nevertheless, a plan may amount to little or nothing more than a façade if the system necessary to implement it is not fully effective. If such system is faced with lack of necessary funding, personnel, equipments, facilities, training arising from lack of political will may make the plan unusable (Tomboiyi, 2004). Preparedness are activities and measures taken in advance to ensure effective response to the impact of disaster including the issuance of timely and effective early warning and the temporary removal of people and property from location of accident (Briceno, 2004). Emergencies require urgent intervention to prevent a worrisome and worsening of the situation thus emergency preparedness means developing programme that will prevent and ensure an effective response to urgent and emergency health problems of pupil, staff and even visitors to school building (Nadine, Hootman and Gelfman, 2001).

Dimensions of Emergency Preparedness
The principles of emergency preparedness could be described as a continuous process, an educational activity that is based on knowledge using appropriate action and reduces unknown during emergency (Drabek and Hoetmer, 1991). The elements include warning/evacuation, search and rescue, providing immediate assistance, assessing damage, continuing assistance and the immediate restoration of infrastructure (Adejuwon, 2014). Preparedness focuses on understanding how a disaster might impact the community and how education, outreach and training can build capacity to respond to and recover from a disaster. This may include engaging the business community, pre-disaster strategic planning, and other logistical readiness activities. The disaster

preparedness activities guide provides more information on how to better prepare an organization and the business community for a disaster. In short, preparedness involves coordination of various activities such as planning, organizing, training, equipping, evaluation and improving existing facilities in order to prevent, protect, responds to recover or mitigate the effect of accident, terrorism or natural disaster. Emergency preparedness being the second phase of the disaster management cycle entails the plans of action used in managing and preventing risks as well as initiating the action needed to implement the plans.

Challenges of Emergency Preparedness

Effective responses to disasters depend not only on the strong leadership and coordinated actions of governmental agencies and professional bodies, but also on the efforts of local residents. Many factors have been identified as impediment to emergency preparedness. These include lack of knowledge of and awareness of possible emergency or what to do in case of emergency. Shlegelmilch and Redlener (2015) opined that Government has a necessary role to play in providing leadership in disaster preparedness but the issue is: does the Government always prepare for this role? Funding is another major impediment facing emergency preparedness in Nigeria. Pines, Pilkington, Seabury and Schaeffer (2014) believed that the infrastructure that has been built to ensure national preparedness is threatened by budget cuts and de-prioritization.

The level of Emergency preparedness in many developing countries is still below standard because weak central planning and management capacity, a lack of strong decentralized emergency response capacity and dependence on international organization for a response still characterize developing countries (Burnham, 2001). Majority of the deaths and loss of properties in recorded disasters have been linked with either inadequate preparation for emergency or insufficient knowledge and skills on how to handle emergency situation by those concerned (Samaila et al. 2015). Quick response to disaster requires multidisciplinary coordination across communities. Ensuring co-ordinated response among groups that do not work together on a daily basis may be a complex task. For instance, ensuring coordinated effort from police, fire-fighters, emergency medical

services providers, classroom teachers, hospital-based physicians, nurses, school administrators, and government officials (Pines et al, 2014) may require much understanding.

Collaborative Model

Collaborative model asserts that conversation partners must act collaboratively to reach a mutual understanding. The model proposed by Clark and Wikes-Gibbs (1986) suggests that collaboration emerges from a series of antecedents, proceeds sequentially through problem and direction setting, implementation, monitoring and lastly evaluation phases. The model realistically describes some of the fundamental collaborative elements such as involvement of stakeholders in planning as well as in the setting objectives. It is believed that this model could explain how the community could work together with school in funding emergency preparedness activities. The model has become increasingly popular for addressing environmental planning issues (Bentrup, 2001)

Steps in Collaborative Model

Antecedents: Recorded problem in the management of an emergency situation such as lack of fund, inadequate financial incentives or a crisis will serve as the catalysts for collaborative planning (Waddock, 1989). The importance of antecedents is that it would instigate collaboration in planning to forestall future occurrence though, Planners for emergencies may need to be patient and have the prerequisite skills to study the events appropriately in order to know the stakeholders to involve.

Problem Setting: Stakeholders recognize those with legitimate stake and the interdependencies that exist among them. It is clearly established that solving existing problem will require collective action (Gray, 1989). In this phase, stakeholders being guided by a co-ordinator will participate in the planning process if threat is perceived and they believe that the benefits outweigh the costs (Selin and Chavez, 1995; Gray, 1989).

Direction Setting: In this phase, ground rules would be set, goals established, and subgroups organized to examine specific issues (Selin and Chavez, 1995) as stakeholders develop a common sense of purpose (Gray, 1989) and participate in collecting helpful information which could help the groups as well as generate mutual gains for members

Implementation: The group is well structured and specific roles are assigned to stakeholders thus encouraging participation and creating sense of responsibility (Gray, 1989). Effective communication is encouraged as every action taken is reported.

Monitoring and Evaluation: The model recommends that stakeholders monitor and evaluate their implementation strategies to determine if these strategies are achieving the group's objectives. In addition, methods of ensuring compliance with the plan are expected to be developed and enforced (Carpenter and Kennedy, 1988).

Importance of Emergency Preparedness

The physical, social and economic losses caused by disasters are particularly harsh for developing countries since they have a long-range and depressive effect in the development process (Sankey and Omole, 2014). The aim of emergency disaster response is to provide immediate assistance to maintain life, improve health and support the morale of the affected population (Adejuwon, 2014). The objective of disaster preparedness is to ensure that appropriate systems, procedures and resources provide timely effective assistance to disaster victims thus, facilitating relief measures and rehabilitation of services (Samaila et al., 2015).

School and Community collaboration on Emergency Preparedness

Effective collaborations have been adjudged to promote team building, a sense of ownership and an environment that provides the maximum resources for success. School and community need to work out a collaborative structure for emergency preparedness by taking the need for collective understanding among the stakeholders into cognizance. The machinery has to be designed to produce quality solutions that each of the groups working alone cannot independently achieve. Emergency preparedness and early self-help efforts of local residents are usually critical for disaster victims' survival (Liu and Robinson, 2013). In addition, Gray (1989) believed that when the groups depend on each other the synergy will produce mutually beneficial solutions. Collaborative and collective action on emergency preparedness could be motivated by shared understanding and commitment between school and community. Interagency coordination with community and

collaborative partners is necessary for an efficient and effective response to public health emergencies and disasters (Shoaf et al., 2014).

Principle of Collaboration
All stakeholders must be encouraged to participate during the planning of emergency preparedness activities. School and Community collaboration will require understanding the idiosyncratic make up in terms of culture, sentiments and environmental circumstances of the locality. It is expected that the relationship is devoid of all forms of hierarchical actions. Community leaders such as traditional rulers, women leaders, chief executive officers, and head of public organisations must be involved in planning and the commitment of every member must be ensured (Gray, 1989). All the leadership of a community must be involved, whether participants fit traditional definitions of leaders or not. Creating and strengthening relationships with community partners such as members of law enforcement, fire safety, Local Government, public health and mental health agencies and the media will go a long way in averting or reducing the impact of emergency thereby ensuring the success of the program. Hennesy (1998) believed that the school administration in advocating for community participation in emergency must appreciate diversity issues and individual differences of the people in terms of what each persons or group are capable of contributing.

During emergency, collaboration in terms of smooth cooperation and compliance through prompt response and providing assistance could minimize the loss or effect of the crisis. Joint efforts are enhanced when involved partners educate each other on each organization's roles and responsibilities, with mutual awareness of resources and expertise improving the collaboration's overall functionality (Leonard, 1998). Effective disaster planning requires communities to be alert to areas of vulnerability, including specific populations who may be at greater risk following a disaster (Adams, 2008). The importance of religious organizations could manifest in area of sensitization and comforting the victims through prayers and counselling.

Recommendations
Based on the review of related literature on school and community collaboration, it is recommended that ownership of schools and community should be educated on the importance of close collaboration when planning for or during the management emergency situations. In addition, community should be encouraged to collaborate with schools in the areas of funding and supplying necessary information that could aid planning. Likewise, Researchers should be proactive in studies on prevention and effective management of schools' accidents and emergencies. Lastly, government should formulate legal framework that will improve the relationship between school and the community.

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