Crisis Management in Bam's Schools After the Earthquake

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Abstract: After the disastrous earthquake of late 2003 in Bam, Iran that 40000 lives were perished and 85% of the city's buildings were destroyed, a study was conducted to find out how the school system had coped with the situation and what kind of curriculum had replaced the regular one. The result of field investigation and intensive interviews with educators showed that no special curriculum was designed for this purpose and no crisis management was in place. **Keywords:** Crisis Management, Education, Bam, Iran, Earthquake

Around 5 am on a freezing cold morning of December 26th 2003, a severe earthquake shook the City of Bam in south – east of Iran.

That strong earthquake that was registered 6.8 on the Richter scale, caused more than 40000 deaths and destroyed more than 85% of buildings. This has been the most catastrophic natural event in Iran so far. According to the UNICEF, 12000 children died and 18000 children in this city lost their parent/s. According to the same report, only 25000 people survived in this city and many others left. In this event, 180 schools were destroyed and about 8000 students and 2000 teachers died.

This 6.8 Richter earthquake has moved experts to study different aspect of the disaster. Since the rates of damages and deaths are much higher in Iran compared to other countries such as Japan and the United States of America, various aspects of the problem has been studied. It should be pointed out that the earthquake happened on an early morning of a weekend. Just what could have happened if it was a school day? How student would have been controlled? Should have students left the school? If they have lost their families, what would have happened ?

Earthquake is a natural event in researchers views, it is not dangerous or harmful by itself. It has been human constructs that has lead to cause sever life loses and financial damages. So lack of required public knowledge and preparedness leads to these disasters (Alidousti, 1991).

Living in seismic regions of the world, requires to have information, knowledge, understanding earthquake patterns and nature. This can be achieved by proper education and training in schools through curricular enrichment and executing strong and reflective school leadership.

Children are very vulnerable and need. As it can be found in the Declaration of Child Rights. Although, childhood is a short period in life, it is a major time for learning and forming the characteristic. Know that fear and anxiety in some adults root in the past and childhood. One case in which damages are very much, is earthquake time. (Moaleg, 1993) . Past experiences of earthquake show that students are one of the most vulnerable people during any disaster such as earthquake. So if there is good planning for increasing the level of information and knowledge,

1

results could be positive. Effect on society easily and get permanent improvement and final goal that is creation of developed and safe country (Aqapour, 2005).

23 types of crisis after earthquake were classified according to conditions of Iran. Some of these crises are social ones which should be studied by sociologists. The following are some of those crises (Reducing Earthquake Risks in Iran, 2004):

- Security crisis
- Women and girls crisis after earthquake
- Vagabond children crisis
- Information dissemination crisis

Since natural disasters are laborious and lead to confusion in children and adults, management will be necessary. Earthquake is a social and managerial crisis which some societies have learned to overcome and some have not yet.

Iran always faces up to severe earthquake because it is located on the earthquake zone. On the other hand, considering the economic and social intense damages caused by earthquakes, the reason seems to be poor management and improper activities of people during the critical situations.

A more modern approach to crisis management views crisis as un coordination between needs and resources. It means that in natural conditions, there is a balance between society's needs and its available resources .If a critical situation arises that causes such unexpected and unusual consequences as earthquakes, floods, storms, wars, etc., the balance between needs and resources would diminish. (Saeedi 2004).

Crisis management means recreating the balance between resources and needs (saeedi, 2003). There is 3 ways for maintaining the balance:

- 1- Increasing the sources
- 2- Decreasing the needs
- 3- Displacing the base (crisis control)

The main challenge of earthquake crisis in schools is un coordination between the needs of students and what is offered to them after earthquake.

Before earthquake happens, schools are best places for preparing students to face up to earthquake .Performing some maneuvers in school without enough trainings about earthquake, is not sufficient, and in students opinion, these activities are just for fun because they have no enough knowledge about it.

The Bam disaster rose some questions, if there had been enough preventive activities and cautiousness, would it have the same scale of destructive aftermath?

This earthquake showed that how vulnerable the country's management can become when an disaster strikes and the previously productive programs are not imbalance with existing needs of Iran and we can not follow up the crisis management depending on existing programs.

In situations like this, school can stands up to the events by congruent management, logical calculations and planning. In order to manage schools well, there should be a strategic plan to determine the priorities and necessary activities.

Crisis management in schools is a preventive method. Each school can create a crisis management core for itself .Creating these cores can reduce many problems and crisis.

After earthquake, any surviving member of a school can maintain and guarantee the security of schools by forming this core and coordination in activity.

Each member is responsible for providing for special needs of students.

Practicing crisis management in schools is very important, and can reducing the effects of crisis.

Through implementing this management, schools can manage to reduce harmful consequences and disasters by identifying the aroused needs and responding to them.

Patrick W. Naughton showed that readiness for coping with events is necessary when the event was formation of emergency committees. Readiness for facing up to disaster is a possible hope.

Dr. Golman's research (1982) showed that lack of enough creditable information about events; leads to disasters and according to assessments, natural disasters are biggest obstacles for economical and social growth and development.

Rofael (1986) believed that 30-40 % people who were injured, suffer from psychological problems at the first year after and at the second year, this. However, some survive.

Nagan, Okiyama .Mryanoto Maba-to (1995) reported about supporting facilities for psychological health of children after earthquake in Kube, Japan. Mryanoto Moba-to Says that all we should do is coordination with confusing situations after happening the event. Communicating with people who live throughout the region is very important and this should be done after happening the event as quickly as possible. In any case, after 5 months, psychical signs such as anxiety diminishes.

There are some reports which show that some children have problem in coping with schools after a disaster strikes.

These reports emphasize on the necessity of recognizing and identifying the psychological problems of children in home, school, society and also the necessity of strengthening close bonds between children and their families.

The results of Yassemi study showed that people who have lost their families in earthquake, are more depressed. The teachers' reports, revealed some educational problems of students so they didn't like to play with others. This study showed that providing counseling services, and coping with anxiety, and having good mental health plans, are most important.

Investigative questions

- 1- How was the conditions of teachers after the earthquake in Bam?
- 2- How was the condition of students after the earthquake in Bam?
- 3- Were teachers and students aware of the possibility of earthquake in Bam?
- 4- Was there a crisis management plan in place?
- 5- Were the post- earthquake activities in Bam's schools in accordance with other countries' experiences?
- 6- Were the students' interests in learning and curricula the same as pre- earthquake time?

These cases are very important and we must pay attention to them. Today, children are considered as one of social classes. This group has great effect on other groups in society, because when an event occurs, it is natural that society wants to secure its children .This group is at risk when an earthquake happens. For example, earthquake of 17/7/1990 (Philippine) at 5:00 pm happened while students were in school. 124 children were died only in one school and it was painful for citizens. The problem was that students did not have enough information about their environment and existing risks and they didn't know how to stand up to risks.

Losing half of the student body in Bam was because of carelessness. A number of students who live in Bam now, have problems in education that should be controlled and the needs of these students and arrange the crisis circumstances.

Given the experience of other countries, collected patterns for training the children in crisis can be designed.

Un compensatory damages to children in earthquake event caused to follow up this study for improving the training and increasing the training quality. Because the training plays a key role in improvement of crisis management, the necessity of studying the crisis management specially in schools should be highlighted.

Research population

Students and teachers of Bam who were in Bam during the AY 2004-2005.

There were more than 10000 students and 2000 teachers in elementary, middle and high school level.

The research population is all students and teachers of Bam's schools.

Sample

The research sample is 4 elementary schools, 4 middle schools and 4 high schools which were in session during 2004-2005. Among them 700 students and teachers were randomly selected.

The Research Instrument

In this study, two questionnaires were used to collect the necessary data which were prepared by researcher.

Each questionnaire had 30 questions in 3 parts:

Part 1 included personal information of participants (age, class, place of birth, education level, changing the school).

Part 2 included investigation of students' and teachers' background (residing in Bam, knowing about earthquake, experience about earthquake, losing family members, returning to school), and knowing about risks of earthquake and preparing for it.

Part 3 asked about the training activities they had and their preferred courses to be studied in their curriculum.

Validity and reliability of the instruments were studied and turned out to be high for the teachers' questionnaire and acceptable for the students' questionnaire.

Results and Discussion

Earthquake is a natural event and prevention of it is impossible .Modern sciences have not succeeded to foresee it precisely. So having necessary information and readiness is the only way for reducing the risks and damages of earthquakes. Damages and losses make earthquake a disaster. If these intensive damages can be controlled, earthquake would change to a natural event such as rain or eclipse. Therefore, human factor have an important role in quality and quantity of earthquake in different understandings about earthquake and methods of confronting it.

Since disasters are created by the ways people live and view the word (culture), so reactions to them will be cultural as well.

It is clear that improving or correcting cultures is not possible without training. So training is one of the most important human needs for coping with different circumstances and situations. History shows that if lessons are not learned from an experience, the same might happen in a greater scale again and again.

The activities of people should changed .With modification of values we can change the activities of children during lifetime .For modification of adults activities, we should act by training and getting people into positive habits formation.

In this study, majority of teachers who responded to the questionnaires, had bachelors degrees and taught in high schools .Most had no information about seismic position of Bam and expressed that they had no previous experience with earthquake.

38.9% had learned about the possible risks of earthquake. However, they had apparently forgotten about it.

There was ignorance among teachers of Bam, while earthquake have happened many years. Although this event had many losses and psychical damages for people of the city, somehow it was forgotten after wards. Bam city has seismic situation. The students were not prepared for earthquake, thus, a disaster occurred.

Teachers are experts who can help to prepare students psychologically for confronting events.

Teachers must be trained for working with students. The role of teachers in knowing the risk of earthquake by students is most important.

The educational system needs to review and assess all textbooks and also role of teachers in training.

Teachers play important role in training .Among the world's industrial countries, Japan has created more changes in social, economical and technical structures by training teachers of all levels.

Most students who answered the questions of this research, studied in elementary schools and the majority of them were natives of Bam most of whom lived with their parent/s.

62% of students had no previous experience about earthquake.

38.5% of them said they had escaped from the place when the earthquake occurred, and only 8% of them took refuge in a safe place. 32/5% of students pointed that they had remained still, 88% were terrified to death and 61.5% of them still are. 53% students said that they had never heard of Bam to be a possible place of earthquake before.

But it is clear that although 62% students never had practiced the maneuver in schools, 88% of them were scared and this shows that even those students who had been practiced the maneuvers, did not know what to do in the real situation, and therefore they were scared too.

Thus the maneuvers had not been effective. Number of students who died in the disaster, showed that they had acted the same as those children who were never taught how to protect themselves in the event of a disaster.

60% of students expressed willingness to see counselors, stress, anxiety and fear compose most of their problems.

However, 37 % of them saw no need to do so. Rate of knowledge and rate of those who had no knowledge about earthquake risks, was equal. And people who had knowledge about earthquake, acted better than others.

Percentage of negative answers to knowledge of students about earthquake risks, was much more than the percentage of positive ones. Most students said that they have learned about the earthquake facts from newspapers and the lowest source of information turned to be the families for the research sample.

6

Bam students had not been trained for reducing the earthquake risks and standing up to it. There is only a brief part about earthquake in the fourth grade "Social Science" textbook and the "Profession and Technique" textbook of third grade middle school.

Most teachers also said that they had no practice for preparing against earthquake and number of negative answers was more than positive answers. Also most of them believed that they did not have enough practice for preparing.

In fact, in Bam's schools, there was not practical field for confronting risks. Planning which is very important, was absent in crisis management of Bam's schools. No one had any information about her/his on job safety duties. So most students died and the survivors were injured because of having no plan.

Most teachers in Bam said that they were active in training the security bases for elementary level students. But in middle and secondary schools, teachers said that they had no activity.

Teachers of elementary schools had no training on mental and physical health, but teachers of middle and secondary schools have paid attention to it.

Teachers of 3 levels indicated that they had no training on health issues, developing positive attitudes toward life in people, self- expression and disclosure to people, proper usage of the public properties .And they said that training the imaginary plays for confronting with challenges was done in 3 levels.

It is obvious that Bam schools have been paid attention to official training program except for security bases in elementary level and imaginary plays in 3 levels. And students said that they prefer to study their lesson and then pay attention to sports and health and security bases.

Lack of pre-defined program, having no training space and utilities ... were key problems in these situations. In teachers' opinion, students had no interest in learning. On the other hand, students believed that their interests in learning was the same as pre- earthquake time.

These comments indicated that school can be safely in session for crisis time .It is recommend that that knowledge and training and skills for confronting with earthquake risks be increased. This can be done in elementary school. Students should learn to protect themselves. The security level of children can be increased through these programs:

Long –term program according to needs of students for confronting against earthquake. This program is executed in nation-wide schools so that we can select students, and graduates and planners for confronting against crises and events.

Short- term program: establishing classes for teachers and experts and people who control the parts confronted with crises.

7

Managers and responsible people should have enough information about crisis because they can reduce damages by using their information and knowledge. This kind of training is foreseen for preparing and having skill in schools.

Although Iran faces many disastrous events each year, and there is an organization responsible for coordinating the efforts and responsibilities of various organizations for confronting those events, the Ministry of Education has not had an active role in that organization so far.

Even, after earthquake of Bam, several seminars and conferences were set, but the Ministry of Education was not represented. The Ministry of Education should collect information and study the causes of events and social problems after crisis, activities of various group and preventive and strengthening factors and offer necessary and practical methods.

Therefore, after every event, schools prepare for confronting against crises systemically. Schools must find ways to reduce this risk- taking because schools should save students psychologically and physically.

Researcher plans a pattern for reducing risk- taking and for preparing against earthquake risk, utilizing other high risk countries' experiences in combination with Iran's native culture. Hoping that by following up to crisis management in Iran schools, these events won't repeat again.

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