

Study the Relationship between Five Components of Crisis Management and Providing a Model

Masoud Poorkeyani¹, Aflatoon Amiri², Nasrin Pirmoradi^{*3}

¹Assistant Professor, Management Department, Islamic Azad University, Kerman Branch, Kerman, Iran

²Member of Scientific Board, Management Department, Islamic Azad University, Kerman Branch, Kerman, Iran

³Student of Governmental Management, PhD Degree, Islamic Azad University, Kerman Branch, Kerman, Iran

ABSTRACT

Natural disasters have been occurred during the life of human frequently. Thousand people are the victims of whirlwind, eruption of volcanoes, flood, drought, earthquake and other disasters like them every year. The natural disasters in addition to have components which are discussed by the natural sciences they have powerful social dimensions. Nevertheless, we cannot stop their occurrence but we can decrease their negative effects and consequences by using of prepared plans and preparedness for emergency actions. Nowadays, the human can decrease damages results of natural and atmospheric disasters such as: storm, flood, freezing weather, firing of forests and drought by using of present technologies and awareness of environment.

The aim of recent research is about "design of five components model of urban disaster management and study of their relationship in Kerman city". Due to the research purpose, this research is a part of extensional and useful research and due to its methods; it is a descriptive research which includes correlation and semi experiential research type that studies the recent situation by field research. Statistical society of this research included two groups. First group: 91 managers of public and governmental organizations in Kerman city and second statistical society included; experts, specialists and authorities of crisis and crisis management. Among these society 30 persons were collected by the improbably and non- randomly method as experts. Therefore the volume of recent samples were 121 persons, this data were collected by using of 6 questionnaires which made by the researcher, after determination their reliability and stability. Evaluating the relationships between the five components of crisis management is performed by SPSS that the Pearson correlation method is used also to determine the desirability of the model is performed by Lisrel software.

Keywords: crisis management , disaster, structure , skill , evaluation, urban crisis

INTRODUCTION

The natural disasters are common events of our world and their occurrence is inevitable. They are such as; flood, storm, wind storm, earthquake, tsunami, volcano, buoyancy and subside of earth and other disorders which are inseparable parts of our natural phenomena and we cannot control them (Valadbeygi and Pourheydari 2010:7).

Due to increasing of natural phenomena throughout the world in previous two decades and expanding loss of life and properties led to more careful looking at the problem. According to statistics of injuries and damages in different dimensions resulted of natural disaster, employing of risk and prevention management will help to confront with such events. (Nourian, 2002:7).

Although, we cannot control these disasters, but people and organizations can effect on the vulnerability degree of society. (Valadbeygi and Pourheydari 2010:18).

1-1 problem description

The extensive geographical area of Iran is one of most vulnerable area of the earth from the view point of natural disasters, every year the occurrence of these events cause to mortality and damages, so it seems that performance of special plan is necessary to immunize urban spaces (Azmoddeh et al, 2006:31).

Placing Iran on the global earthquake belt and existence of accumulative population changed Iran to a very valuable country against the events, so that, every year we are witness of these events on the one area of this wide country. Immethodical growth of the population, urban constructions and extending them to urban margins without suitable plan and programs and occurrence of expecting events and unexpected events increased the gravity of the situation (Tomas E et al, 1940:1). The accumulation of population is led to increase of cities vulnerability against natural events and

***Corresponding Author:** Nasrin Pirmoradi, Student of Governmental Management, PhD Degree, Islamic Azad University, Kerman Branch, Kerman, Iran

ecological crises, sensitiveness of crisis management and contrasting plan and crisis effects. It seems that new skills and abilities are necessary to confront with crisis, changing failure to success and disorders to arranged situation (Jonson, Schulz, 1998). In whole human organized actions, some anticipations plans are prepared for unsuitable events, which essential components of them are as follow; planning, organizing, investment and equipping. Sometimes the dimensions of these events is so that previous anticipation cannot response effectively, so in this case special management is necessary that is called crisis management (Birudian, 2006:13).

Kerman province is one of most vulnerable provinces of the country since it has more faults, deserts and semi deserts weather in most region; so it always exposed to many dangers and it suffered many mortalities and financial damages; so that always main part of this province budget is allocated to confront with these events and decreasing the damages. Therefore, because of its high susceptibility conditions of this city so performance of studies about crisis management is very necessary. The problems such as; non coordination of organizations, regulations and rules deficiency, shortage of present rules and regulations, financial resource limitation, unspecified administrators for the issues related to crisis management and information deficiency in existing information systems in the field of crisis management (Hassani, 2005:75), will cause to necessity of profound thinking about the components of damages, effective factors of crisis control, skills, abilities, structures and mechanisms that are needed to crises control. Due to above mentioned cases, the questions which this research will answer them include:

- 1- Is there any relationship between five components of crisis management?
- 2- Has crisis management model fitness and suitable desirability?

2-1 Importance and necessity of the research

Our society is not only one that is exposed to threat of natural and unnatural crises. Also our age is not only one that the crisis and risk management is important in it, history shows that the ancient people applied crisis and risk management practically, For example, migrating of human societies from dangerous area to secure area for decreasing the disaster risk. Things which are new in recent age include scientific looking at this issue, optimization and accommodation of necessities in this period. (Bahaduri *et al* 2007:3)

Due to evaluation of occurred crises which have been occurred in our country, and paying attention to the statistics of them in 100 previous years, this bitter fact determined that about 3700 earthquakes have been occurred in Iran, which among them, 535 earthquakes occurred with more than Richter strong also every 10 years, earthquake with 7 Richter strong or more have been occurred. In other side about 200 small and big earthquakes occur annually. So programming of cities security and organizing new aiding methods with uniform and useful management is very important in the country. Absence or weakness of urban and local plans leaded to irreparable physical and mental damages, According to the statistics of human casualties like earthquake (which is an event that formed one percent of casualties in 100 previous years), in Iran the casualties of this event was equal to 6 percent of whole casualties in the world (Ehsani, 2005) so that, one third of these casualties have been occurred in Kerman province. Fortunately, the researches show that there is a general method or framework to organize the crises. But it does not mean that even with existence these methods and frameworks human can prevent all crises. In fact, complete prevention is not possible, but suitable plans and anticipated preparedness can decrease duration and serious damages of big crisis. The studies show that the societies and organization which are ready to confront with crises, not only they can repair themselves quicker, but in comparison with societies and organizations which are not ready to confront with crises, they will sustain less damages. (Mitraf, Engnas, 2002:23).

Research theoretical principles

The crisis is a serious cause of separate operations in one society and it will lead to loss of life, investments, property and environment damages (ISDR, 2009)¹.

Crisis management consist of policy making, taking decisions of management and performance of practical measures for the purpose of preparedness, reduction of mortal effects, responsibility, restoration and reparation the effects of natural disasters or human disasters (UNDP, 2005)².

The crisis and calamity management deal with planning, prevention and mortal effect reduction, readiness of cities to confront with crises and increasing of abilities, skills in suitable reaction while

4. International Strategy for Disaster Risk Reduction
2. United Nation Development Plan

disaster occurs also useful management after crisis to reconstruct the cities to a normal situation (Johnson, 2000:6)

Therefore the main purposes of crisis management involve correct management, coordination of governmental organizations and nonprofit organizations to control probable damages also changing of dangerous situations and busy ones to profitable and suitable situations. (Hadizadeh Bazaz, 2007: 26-29).

Since the measures of damages reduction and prevention are performed by different administration and organizations, the role of crisis management includes execution of plans, development programs and coordination of different organizational measures (Kolavalli, 2002: 213). The aim of crisis control is about, planning of crisis control that includes 4 stages: firstly, unexpected events should be anticipated. Secondly, expedience plans should set, then operation groups of crisis management should be thought and organized. Finally, to complete the program; they should be trained practically (Conkey, 1987: 81).

Natural crises are some of crises which their sources are natural events of the earth (volcano, interior collapse, erosion and block movement of the earth), atmosphere (wind, storm different cloudbursts, frostbite and drought) or biology (animals rebelling, plants, microorganisms and...) sometimes it is a combination of three phenomena (Birondian, 2006: 23).

Unnatural crises or human made crises are some crises which are result of human activities in the industrial, natural sources utilization, social issues, commercial, political, cultural and ideological fields.

Five components of crises management

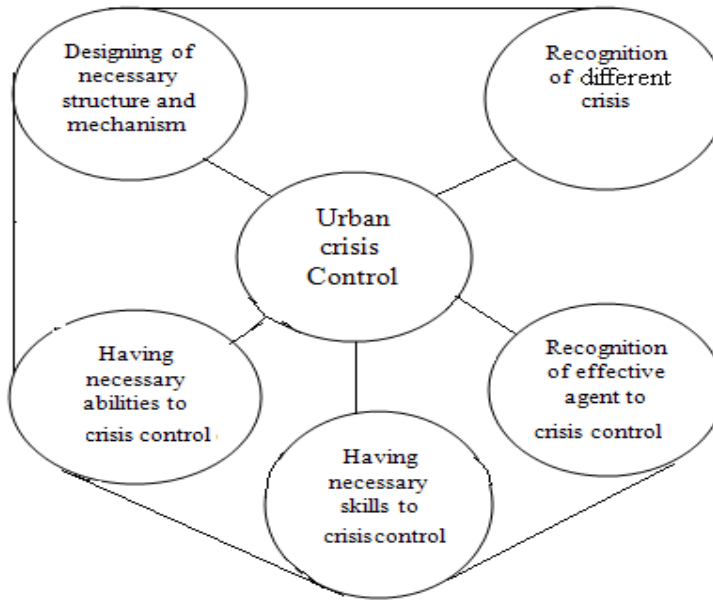
Five components of crisis management which are studied in this article are as follow;

- 1- Types of disasters.
- 2- Effective factors of crisis control.
- 3- Necessary skills and mechanisms for crisis control.
- 4- Needed abilities for crisis control.
- 5- Necessity structure and mechanisms for crisis control.

According to the results of a research which is performed in Kerman city on 2010, among 73 recognized crisis, occurrence probability of 51 crisis were high which among them, drought, groundwater reduction, earthquake, addiction, inflation, making gap between social , smuggled goods, materialism and luxuries life, road accidents have the priority from first to tenth respectively and crises like: flood, racial and national disputes, hail, sabotage operations, terrorist action, raising of wells level, murder and killing, water oscillation, earth subsidence and high accumulation in residential area have less priority. Also actions before crisis occurrence- actions during crisis occurrence and action after crisis occurrence have important role to control urban crisis.

To control urban crises, among 31 recognized skills which examined and accepted some skills like ; programming, management, arrangement, decision making, planning and supervising of supervising, skill of problem solving, skill of stimulation and human skills are some of skills which have most effect on control of urban crises these 16 recognized abilities that examined and accepted, also the actions like quick reaction responsibility thinking abilities, reinforcement of hope, experience, hard working and energetic performance, reinforcement of confidence sense , having professional information , decisive decisions and prevalence over the fright of failure that have most effect on control of urban crises. It is mentionable that among recognized factors and structures which were tested and accepted, we can refer to the following parts: researches and studies (prevention section), operation section(confronting) , planning section(preparedness),section of operation directorship, technology section, uniformity making section of crisis management system, education section, logistic and support section, information and statistic section and section of arrangement among serviceable organizations that have most effect on the control of urban crises (Amiri, 2010: 109-112).

Due to theoretical principles and performed researches following model is suggested as primary conceptual model to control the urban crises:



Different kinds of urban crises:

A) Due to Mantraph and Angenas view different kinds of crises are as fallow (Translation of Tutunchian, 2002:28):
 Natural crises: earthquake, conflagration, flood, explosion storm, whirlwind
 Psychological disasters: manipulating of products, kidnapping, taking hostage, terrorist actions, roughness in workplace
 Reputation disaster: calumny, rumor, jesting, reputation damages
 Human resource crises: loss of human resource, increase of backbiting, increase of sabotage, roughness
 Material crises: loss of equipments, factories and supplies, destroying of main equipments of factories, destroying of necessity equipments and big disorders in factory
 Information crises: loss of private and secret information, incorrect information manipulating of computer documents, loss of key data of computer.
 Economic crises: labor strike, labor disturbances, labor shortage, fall of stock interest and fluctuation of prices, fall of market, main incomes reduction.

B) Seadat Nouri (2006) suggested another classification of disorders as follows:
 Natural crises: earthquake, flood, drought, desert increasing, moving of sea water on lands, volcanoes, avalanche natural conflagration
 These crises are imposed by human: air pollution, acidic rains, greenhouse effect
 Political crises: identification crisis, legitimating crisis, partnership crisis, influence crisis, distribution crisis
 Economic crises: inflation, wrongful monetary and credit policies, rapid fall of prices or production and income volume, unemployment, poverty and increasing of criminal actions, fall of stock exchange transaction, playing with stocks
 Social crises: loss of family structure, prevalence of luxurious life and imitation, making gap between social classes, migration of villagers to cities, materialism increase, lie and dissimulation, changing of farmers as a producer class to a consumptive population, irregular growth of population

Effective agents of crises control:

Aalavi (2008:224) suggested the following components to crises control:
 1- Prevention and reduction of effects. Effect reduction: occurrence or effects of disasters
 2- Preparedness: scheduling and research, teaching and maneuver.
 3- Confrontation: providing necessity services after crisis occurrence.
 4- Rebuilding: restore the society to normal condition but not exactly like before crisis
 Prevention, preparedness and warning are 70% of crisis management process. If the mentioned stages performed carefully, so the people and organizations will receive less damage.

- Alavi(2008:15) suggests these factors to control and manage crisis:
- A) Before crisis occurrence:
 - Recognition of environment and different kinds of crises
 - Evaluation of abilities and arranging them by their priority
 - Set of necessity rules for prevention actions, preparedness, awareness and warning, resistant building and damages reduction
 - Definition of duties for organizations which are responsible in crises circumstance
 - Definition of command structure in crisis and the way of their relationship
 - Definition and execution a plan for classifying dangerous areas
 - To commit main parts of aiding and saving actions to people as public organizations.
 - Planning of preparedness, awareness, educating and organizing the local people to decrease damages.
- Maneuver and practice of governmental and public organizations
- B) During crisis occurrence in 72 primary hours;
 - 1- Data collection about human, animal, structure, infrastructure and economic damages;
 - 2- Information Practicing and estimating;
 - 3-responsibility;
 - 4- Relief and save;
 - 5- Looking after injured persons;
 - 6- Gathering and burying of victims;
 - 7- Opening of main roads;
 - 8- Securing security;
 - 9- Traffic control around crisis
- C) Recovery:
 - 1- Looking after injured persons
 - 2- Providing of necessity goods
- D) Normalization:
 - 1- Activation of offices, centers and organization
 - 2- Providing peace places for people
- E) Rehabilitation: 1- rehabilitation of economic, commercial, industrial, residential and official centers

Necessary skills to control crises

(feghhi farahmand, 2002: 411)	Moghime, 2004:230)	(mantana, 1995: 7)	(jasebi, 1992: 217)	(tayebi-maleki, 2004: 7)
1- individual skills A) self awareness expansion B) communication with each other and consensus c) pressure management D) time management E) giving over responsibility F) innovation in problem solving G) social skill 2-communication skills A) communication with other B motivation making C) solving disputes 3- self management skills A)self awareness B) self organization C)motivation	Non communication skill Using of time skill Decision making skill Problem solving skill Conversation skill Giving over responsibility skill Goal making skill Dealing with groups skill Solving conflict skill	Communication skill Motivation making skill Decision making skill Plan of time skill Solving conflict skill Dealing with groups skill	Technical skill human skill perceptual skill Design skill	Communication skill Conversation skill Problem solving skill Transformation skill Observation skill Training skill

Needed abilities to crisis control:

- Henry Mayol, suggested some abilities that included as fallow:

- 1- Mental ability; 2- physical ability; 3- moral ability; 4- having general information; 5- having special information; 6- experience
- Ahmadi(2002;167-168) suggested some abilities to confront with crises as follow:
1-calming protection; 2- making self reliance in our self and others; 3- decisiveness; 4- agility and nimbleness; 5- ability of hasten decision making; 6- reinforcement of mentality; 7- no control loss; 8- no hasty and improper reaction

Needed structures and establishment for crises control

One of crisis management duties in organizations is establishment of special teams to confront with crises.

Structure of crisis management center can include following components:

- 1- Performance of researches and surveys about previous events, data collecting of organizations and people performances. Updating the data of organizations, providing logistic strategy among (crisis management) and the way of data using during disaster occurrence, providing strategies about communication methods, training of organizations members, training of common people, organizing the organizations, organizing the people, training the method of alters to organizations and people during crises, the way of organizations and people performances in crises management cycles.
- 2- They should be employed as skillful persons in different parts of command:
Director of center or manager of crisis; assistant of research and surveys; assistant of programming, information center; manager of communication about training assistant, organizing and maneuver; official and financial assistant; pathology assistant, survey assistant, to supervise management of international relations; manager of public relations (Alavi,1999:240)

Research methodology

The aim of recent research is about "design of five components model of urban disaster management and study of their relationship in Kerman city". Due to the research purpose, this research is a part of extensional and useful research and due to its methods; it is a descriptive research which includes correlation and semi experiential research type that studies the recent situation by field research. Statistical society of this research included two groups. First group: 91 managers of public and governmental organizations in Kerman city and second statistical society included; experts, specialists and authorities of crisis and crisis management. Among these society 30 persons were collected by the improbably and non- randomly method as experts. Therefore the volume of recent samples were 121 persons, this data were collected by using of 6 questionnaires which made by the researcher, after determination their reliability and stability. Evaluating the relationships between the five components of crisis management is performed by SPSS that the Pearson correlation method is used also to determine the desirability of the model is performed by Lisrel software.

The aims and hypothesizes of the research

- Study relationship between urban crises and the effective factors on control crises, skills, abilities, structures and needed mechanisms for control crises.
- Study relationship between necessity skills for control crisis and the effective factors on control crises, urban crisis, abilities, structures and needed mechanisms for control crises.
- Study relationship between necessity abilities for control crisis and the effective factors on control crises, urban crisis, structures and needed mechanisms for control crises.
- Study relationship between structures and needed mechanisms for control crises and urban crisis, the effective factors on control crises, skills, and needed abilities for control crises.
- Providing a model and evaluation of its desirability.

Results:

First question of the research:

Is there any relationship between the five components of crises management?

The relationship between each component and other four components of crisis management is surveyed by Pearson coefficient correlation, so the following results are found:

- A) There is a positive and significant relationship between urban crisis factors with effective factors, skills and abilities of crises control but it has any relationship with structures of crisis control.
- B) There is a positive and significant relationship between effective factors on crises control and the four factors (urban crises, abilities, skills and structures of crisis control).
- C) There is a positive and significant relationship between skills of crises control factors and other four components (abilities, structures, urban crises and effective factors of crises control)
- D) There is a positive and significant relationship between abilities of crises control factors and other four components (skills, structures, urban crises and effective factors of crises control)

E) There is any significant relationship between structure of crisis control component and urban crisis component but it has positive and significant relationship with other three factors (skills, abilities and effective factors on control crisis)

Table 2: To study the relationship between variables by Pearson coefficient correlation

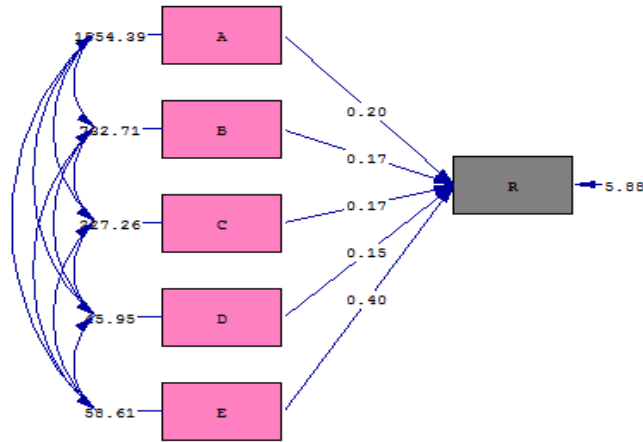
					Components	
Structure of crisis management	Abilities	skills	Effective factors to control crisis	Urban crisis of Kerman		
0.023	0.179(*)	0.213(*)	0.259(**)		coefficient of correlation	Urban crisis of Kerman
0.801	0.049	0.019	0.004		Significant	
121	121	121	121		number	
There is not a significant relationship	There is a positive and significant relationship	There is a positive and significant relationship	There is a positive and significant relationship		result	
0.494(**)	0.583(**)	0.631(**)		0.259(**)	coefficient of correlation	Effective factors to control crisis
0.000	0.000	0.000		0.004	Significant	
121	121	121		121	number	
There is a positive and significant relationship	There is a positive and significant relationship	There is a positive and significant relationship		There is a positive and significant relationship	result	
0.463(**)	0.730(**)		0.631(**)	0.213(*)	coefficient of correlation	skills
0.000	0.000		0.000	0.019	Significant	
121	121		121	121	number	
There is a positive and significant relationship	There is a positive and significant relationship		There is a positive and significant relationship	There is a positive and significant relationship	result	
0.479(**)		0.730(**)	0.583(**)	0.179(*)	coefficient of correlation	Abilities
0.000		0.000	0.000	0.049	Significant	
121		121	121	121	number	
There is a positive and significant relationship		There is a positive and significant relationship	There is a positive and significant relationship	There is a positive and significant relationship	result	
	0.479(**)	0.463(**)	0.494(**)	0.023	coefficient of correlation	Structure of crisis management
	0.000	0.000	0.000	0.801	Significant	
	121	121	121	121	number	
	There is a positive and significant relationship	There is a positive and significant relationship	There is a positive and significant relationship	There is not a positive and significant relationship	result	

**All these coefficient correlations are significant at 0.01 level (p<0/0.01)

Research second question: Has presented model fitness and desirability value?

Study of model fitness base on indexes of model fitness:

A	Urban crisis of Kerman
B	Effective factors to crises control
C	skills
D	Abilities
E	Structure of crisis management
R	Urban crises control



Chi-Square=0.00, df=0, P-value=1.00000, RMSEA=0.000

$$R = 0.20*A + 0.17*B + 0.17*C + 0.15*D + 0.40*E, \text{Errorvar.} = 5.88, R^2 = 0.97$$

Goodness of Fit Statistics

Degrees of Freedom = 0
 Minimum Fit Function Chi-Square = 0.00 (P = 1.00)
 Normal Theory Weighted Least Squares Chi-Square = 0.00 (P = 1.00)

The Model is Saturated, the Fit is Perfect !

To measure desirability of the model, the lisrel software is used. Outputs of this software included; path chart and fitness indexes also line equation accordance with independence and dependence variables.

In this research there is a line equation that dependent variable is on left side and independent variable(s) there is on right side.

The chart related to conceptual model is drawn by the software that there are four indexes under it that survey the fitness situation of the model.

First statistic is the value of chi square test, Second statistic is degree of freedom, third statistic is p-value related to chi square test and fourth statistic is index of fitness (RMSEA) model.

Analyze: If the p-value be more than 0.05, it will show that the present conceptual model have fitness with desirable conceptual model and whatever it closes to 1 the conceptual model will close to desirable conceptual model. So that when this value is equal to 1, chi square value is equal to zero and present model will be equal to desirable model it means that your conceptual model is same as desirable model.

Second alternative for fitness of conceptual model with desirable model is; evaluating index of (RMSEA) model fitness whatever it closes to zero, so the present model have more fitness and similarity with desirable model and if this value is equal to zero, It means that the present and desirable models are same.

Discussion and evaluation

A published statistic showed an increasing procedure that injured persons from 1969 to 1999 were 60 million on 1969; 380 million persons on 1987 and 375 million persons on 1991. Commercial damages due to the disasters from 1960 to 1996 were 10 milliard dollars on 1960, 43 milliard Rials on 1995. According to a study which performed in Asian continent showed that its disasters were three times as much African continent and double as American and European continent also they were four times as much Oceania continent. One fourth of world population is exposed to dangers of natural disasters. Financial damages of these events is estimated about 40 milliard dollars on middle time of 1960s and 120 milliard dollars on last time of 1980s , 1990s in underdeveloped countries. These estimations showed that 600,000 persons killed during 1950-2001 by huge disasters and 0.1% of victims killed in advanced countries and 99% of them killed in underdeveloped countries. This condition was different until 1950, so that 30% of these mortalities were in advanced countries and

70% of them were in underdeveloped countries. During 2 previous decades, 3 million people of the world are exposed to danger of natural disaster. The global report of disasters (2003) showed that 5402 important natural and human made disasters damaged 2,496,800 people of world and according to this report they had about 663749 dollars damages. The statistics about earthquake in recent century showed that they caused to more than 10000 killed persons and 250,000 homeless persons so these statistic shows the effects of disasters on different societies.

The comparative evolution about the occurred disasters during 2004, 2005, showed the growth of them on 2005(157,511,938 persons on 2005 and 150436491persons on 2004).Due to a performed research until last days of 2010 among ten big cities of the world, eight of them were in advanced or underdeveloped countries which they caused to many damages and mortalities.

The explosion of Chernobyl nuclear power house of Russia which occurred on 1986 is a clear example of dangerous disasters. In this event, in addition to mortalities and damages, it compelled Russian government to transform 1,350,000 peoples for away their houses, but the radioactive affects resulted of this explosion expanded about 250 km near the power house. Due to the global report of events Iran has most number of mortalities and damages because of accidents in the world after six underdeveloped countries; Malawi, Antigua & Barbuda, Kiribati, Cambodia, Guyana, Djibouti. According to this report 9.28% persons of this population has been injured because of natural disaster and accidents from 1992 to 2001. Performed evaluations on 40 natural identified events, was detected occurrence probability of 31 cases in Iran. For example this country has been experienced 22 floods which destroyed 9 areas of the country just on 1994(14). About 1536 serious and slight earthquakes have been occurred in Iran during 1991-2001 also in this time 896 floods, 712 other events like; firing of forests because of violent hot weather, earth buoyancy , serious storms, raising of seawater to littoral regions and installations, frostbiting, drought have been happened until 2001. 349 disasters such as; flood, storm, earthquake have been occurred just on 2002 and their financial damages was estimated about 3828 billion dollars , 80% of earthquake mortalities throughout the world is belonged to six countries such containing Iran during 3 resent decades also one third of world disasters belonged to Asian countries that among them Iran had most natural disaster after China, India, Bangladesh .The Roudbar earthquake of Iran which happened in Gilan and Zanjan on 1990 (26 July) with 7.3 Richter strong and it rolled up 1100 km included 27 cities and 1871 villages and remained 35000 dead just in a flash time.

The earthquake of Bam had more than 30000 dead, 85000 injured persons and 85% of this city destroyed seriously and it destroyed commercial installations and ecotourism of this city damaged seriously(18).

In first encountering with critical conditions the probability of its occurrence and preventive performances are very important, so that human should anticipate them or he should stop them as far as possible, in other side, he should prepare herself to tolerate minimum damages or mortalities, if he encountered with an unexpected crisis he must behavior logically and wisely, he must decrease the damages of crisis and return society or government to primary situation. Therefore the stages of crisis managements are as fallow:

- A) Necessity studies to evaluate crisis probability.
- B) Performing preventive measures and increasing of safety against crisis.
- C) Forecasting necessity performances to confront with crisis.
- D) Necessity measures after crisis occurrence.
- E) Reconstruction and repairing of crisis damages.

Tazosun believed that; "recognize your enemy as well as yourself so you will see that you never fail through thousand battles but when you are heedless of your enemy and when you ignore his presence even you recognize yourself, know that the chance of your wining and failure is same. If in a situation, you forget yourself and your enemy so you will be loser of every battle.

Therefore Confronting against a crisis is like a battle so we should recognized both crisis and our abilities and equipments (Davari and Shanesaz, 2001:4)

Also the presence of many centers for decision making in a system, is weak side to confront with critical situations in a country. (Montoya & Lorena, 2006: 360)

Disasters may be not same due to their events and always they are different because of their shape, strong, injured societies and their damages but they have many common component that they lead to same management. For example crisis resulted from earthquake and epidemic diseases are not same, by no means. But both mentioned crisis have common sides like human mortalities, disorders in routine life of people, psychological and social confusions and finally vital need to reaction, saving, normalization. These common events in different disasters were shaped the crisis management and

they made the components of it. Consider that disasters are not stable, but they change, develop and finally subside. Some of disasters may be occur only one time while most crises occur periodic and they happen many times. It is mentionable that periodic disaster can be weakened by decreasing vulnerability degree of societies, on the contrary, susceptibility and vulnerability of societies will increase gravity of situation. Therefore it is mentionable that decreasing of susceptibility and vulnerability is definite and suitable strategy to confront with crises (Beyroudian, 2006:194).

Therefore crisis management as an organized procedure is tried to recognize the potential crisis and anticipate them then perform penetrative action against them to decrease their effects, there is any uniform model that can guide the crisis management. Every researcher has been focused on special component of crisis management procedure for example Mitraph and Sherive Estav (1987) focused on crisis accounting, Nelson and Harcheler (1986) focused on crisis management teams, Trubet and Kelli (1989) focused on schedule of crisis management, Reili (1987) focused on preparedness against crisis, Eshrider (1990) focused on undesirable events, Pavchant and Mitraph (1992) focused on necessity preparedness against crises and organizational treaties about crises also they performed some researches about them Meanwhile the procedure of crisis management should include all components, since every component is important part of crisis management (Rezvani,2007).

Also, to prevent of disasters and crisis or decreasing their effects far from technical subjects, we confront with planning of crisis management. If the problems and difficulties resulted of crisis is not anticipated so expenses related to reconstruction and restoration will be very high. Because of it the suitable use of crisis management methods can be effective to prevent of environmental events. Having practical plans and suitable pattern in one side will lead to reinforcement of society in all fields and in another side financial damage rate, mortalities, social and commercial disconnection and environmental damages will increase seriously. (Atrchian and Garkaz, 2006:1)

The crisis is an unexpected and unawareness situation that all organizations less or more dealing with it. So we can decrease the negative effects by the perception the facts of crisis. The important measures during a crisis include; making peaceful, decreasing anxiety causes, battle abstains, making decisions, more attention on aiding manners during disasters and difficulties. To perform suitable expectative measures against crises, necessity teachings and performance of maneuvers so we should introduce human resources with the principles of crises management. To prepare our self against crises and preventing confusion and precipitance, in addition to anticipate crises, we must perform necessary educational courses and carrying on maneuvers. Fast measures to conserve and maintain properties of organization are necessary during crisis occurrence that we must pay attention to them.(Yarahmadi Khurasani,2005:43)

Minutely looking at natural, local and situation strategically, population scattering, kind of cities settlement and generally continental and local situations around the country shows that there are potential conditions to occur unexpected crises and disasters. Therefore paying attention to have a spacious program as an important part of country development plan can play important role to decrease effects and consequences of disasters, controlling human mortalities and damages effectively. Even if preventing of natural disasters is not possible, but the consequences of them will be decreased by knowledgeable manner and management. According to the kind of organizing, management and the manner of different societies sometimes these natural hazards change to calamity. All kinds of communication devices, information and communication technology also media such as electrical, visual, acoustic and written media, warning systems before crisis occurrence and public training about disasters can play very important role in crises management also they can decrease losing of life and properties significantly. (Tavakuli,2009).

Now days, the national strategies to conserve vital infrastructures and key capitals of countries are main parts of crises management systems (John, 2004, 1).

To programming by software and hardware therefore making necessity sensitiveness about safety problems the measures of crisis management (before, during and after crisis) due to all dimensions such as pre –awareness, prevention, preparedness, aiding and saving, teaching and development of public awareness, immunization as a uniform set with cooperation and agreement of all related parts are mentionable.(Rahbar,2008:39).

Establishing urban crisis management staffs, organizing and making cooperation between organizations which have the power to make decision about directorship of urban crisis control are most important alternatives for decreasing vulnerability against natural disasters. Besides, developing of people's awareness about dangers of natural disasters and changing of people's behavior are necessary. Also citizens should believe that they can organize themselves against natural disasters they can prevent and aid themselves, besides, to immunize cities against natural disasters, the culture

of immunization should be developed. It is clear that people , urban managers and governmental authorities should have suitable cooperation and obligation in the execution of immunization policies also they should acquire the necessary knowledge (Taghvayi and Keyani, 1387:37)

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