

## **DISASTER PREPAREDNESS**

### **1. At the National level :**

In 1965, a Coordinating Body for Disaster Relief was established by Presidential Decision No. 312/1965 which concentrated on provision of social assistance and then further replaced by a natural Disaster Relief Council created by Presidential Decision No. 256/1966 which was chaired by the Minister of State for People's Welfare. A coordinating team for the implementation of National Disaster Relief at the national level chaired by the Minister of Social Affairs was established by the Presidium Cabinet Decision No. 14/4/12/1966 while at the provincial and regency level/municipality the coordinating team is chaired respectively by the Governor and the Bupati/major.

There are a total of 27 provinces and 258 regencies/municipalities which perform respectively the 27 Satkorlak PBA—I and 309 Satkorlak PBA—II.

The Presidential Decision No. 28/1979 was issued as an amendment to the previous decision to embrace the total spectrum of disaster response by which a new body replaced the previous, one and called National Coordinating Board for Natural Disaster Relief (Bakornas PBA). At the national level this BAKORNAS — PBA was chaired by the Coordinating Minister for People's Welfare and the Minister of Health is one of the members. At the provincial and regency level this board is chaired by the Governor and Bupati respectively.

The focal point is the Ministry of Social Affairs which results in some confusion because the disaster response has been limited only to the relief aspect. This is not parallel to the fact that disaster management is understood in its comprehensive meaning including prevention, mitigation, preparedness, relief and rehabilitation/reconstruction.

### **2. Health Sector Disaster Preparedness :**

The Director General of Communicable Diseases and Environmental Sanitation is representing the Ministry of Health at the Bakornas — PBA and is also in charge of the coordination and implementation of health activities in case of epidemic outbreak.

The Directorate General of Medical Care has designated the Sub—Directorate of Emergency and Evacuation Service as the focal point in the development of EMS (Emergency Medical Service), disaster preparedness and management and Accident/Injury Prevention Programme. However there is no national health disaster coordinating committee which has been established.

At the provincial and regency levels, the chief of health office is member of the Satkorlak and participate in disaster management under Coordination by the Governor or the Regent. The Ministry of Health has tried to develop the Emergency Medical Service Communications. In the absence of the communications system the Armed Forces and most notably the amateur radio provide the needed radio-communications during disaster.

The other activity yet to be developed is the hospital disaster plan except for a few hospital in Jakarta and Surabaya.

#### **Recommendation :**

It is obvious that regardless of their origin, disaster have a substantial impact on the safety, health and well-being of the affected populations. In developing countries such as Indonesia and many others in the Southeast Asia and Western Pacific region, disaster can have prolonged adverse effects on the implementation and success of national development efforts. The Republic of Indonesia is especially prone to many types of disaster, therefore an integrated national efforts have to be established in the aspects of prevention, mitigation, rehabilitation and relief of disaster management.

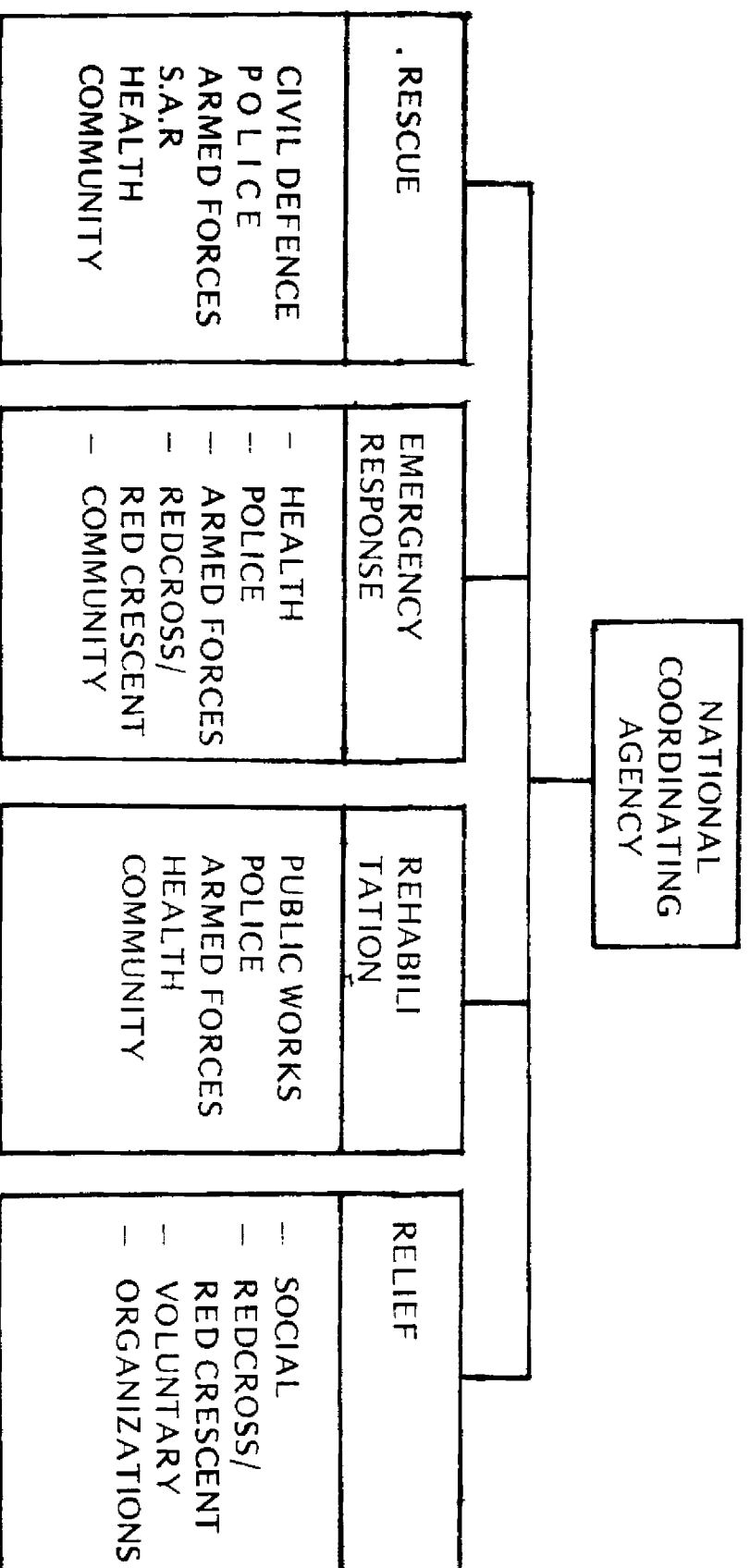
The Ministry of Health recommends some action to be taken within the health sector and with regards to the inter-sectoral coordination as follows :

1. That the term "Natural" be dropped from the National Coordinating Body for National Disaster Mitigation so that it will be responsible for all kinds of disaster (not only natural).
2. That any disaster management must include the two basic aspects namely :
  - 2.1. Community involvement aspect, so as to develop people's self reliance before External help comes.

- 2.2. Inter-sectoral coordination aspect which consists of :
- Rescue component where the SAR, Armed Forces, Civil Defence, Fire Brigade, Police and Medical Team are in the front line
  - Medical Emergency component where the Health, Red Cross and ambulance personnel are in the front line.
  - Rehabilitation component where the Public Works, the Armed Forces, Civil Defence etc are in the front line.
  - Relief component where the Social workers, Red Cross, Civil Defence etc are in the front line.

Tabel 3

THE NATIONAL ORGANIZATION SET-UP ON DISASTER  
MANAGEMENT



3. That in order to mitigate disaster (~~equivalent~~ to big accidents) routine and daily emergency medical services must be strengthened first because disaster management is basically the escalation of it and the total number of mortality and morbidity of daily accidents is much higher. Routine epidemics monitoring must also be strengthened to monitor outbreak
4. That Bakornas – PBA and all related sector shall develop standing procedures at the national, provincial, regency levels and on-site of disaster and establish a crisis center at each level.

Table 4

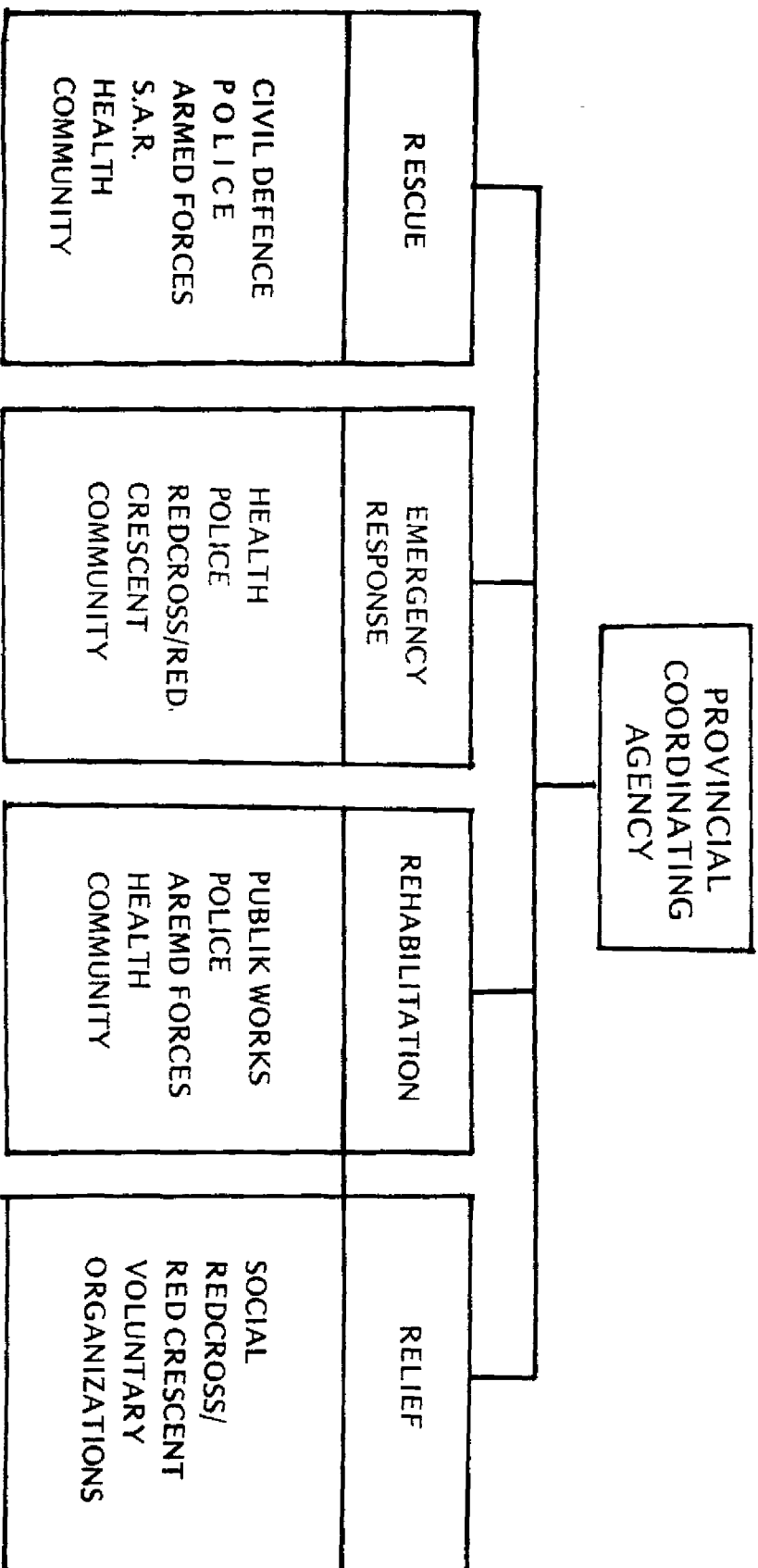
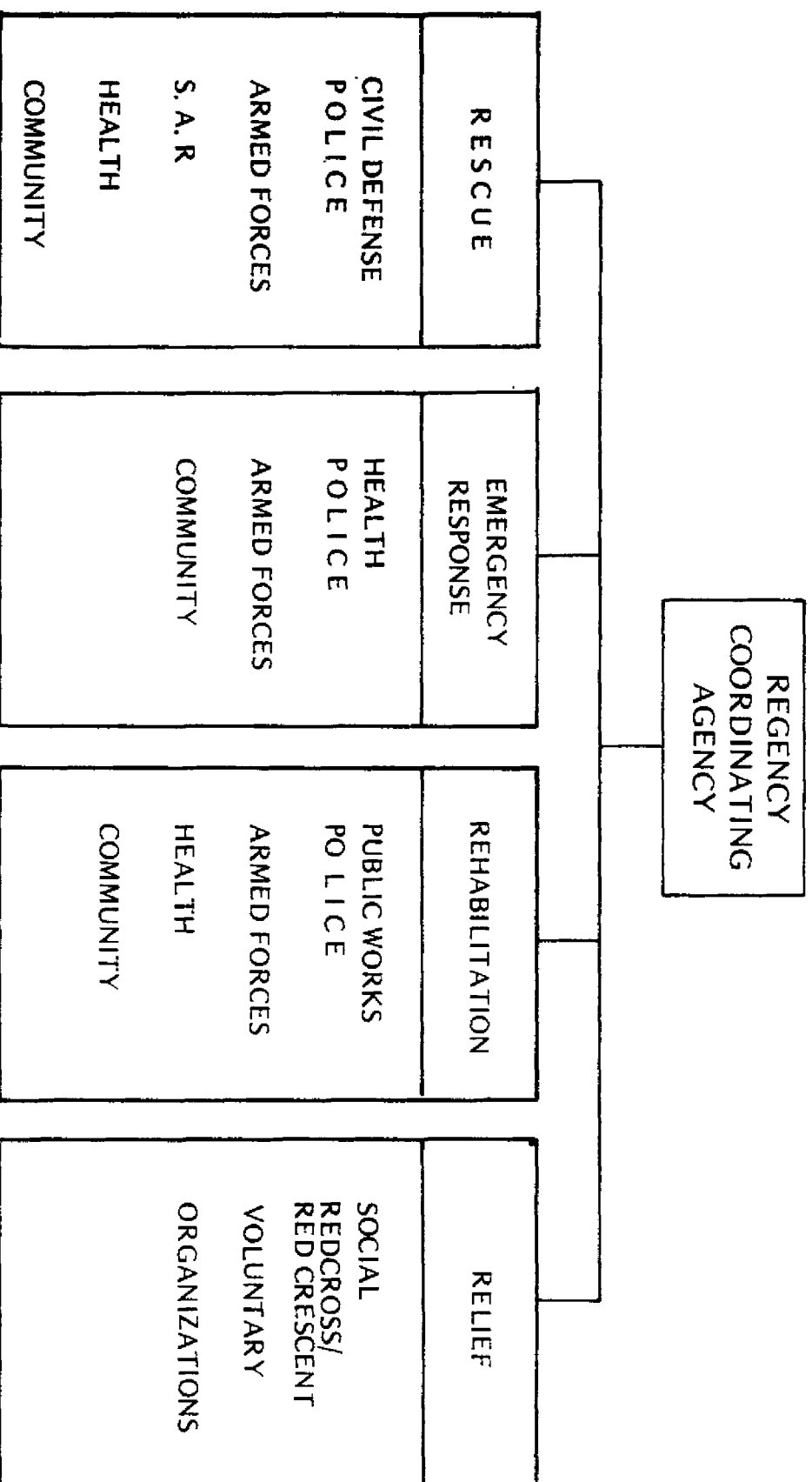


Table 5 :



5. That the Ministry Telecommunication designate common emergency number for telephone and radio communication not only for air and maritime accidents but also for inland accident which cause much higher mortality and morbidity.
6. That the Ministry of Health shall establish trauma team at national and provincial levels and nation wide disease mapping.
7. That the Ministry of Health shall strengthen the accident and Injury Prevention programme including the Poison Information Center and Poison Control Centre.

Jakarta, November 7, 1987



# **LARGE SCALE CASUALTIES MANAGEMENT IN DISASTER**

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## **INTRODUCTION**

Large scale casualties can occur because of various conditions or disasters.

The cause itself might be an incident in very crowded places, such as an explosion in a sport stadium, supermarket, etc, or it might be a bigger accident such as an aircraft/ship accident, fire in hotels, offices or other high rise buildings. In these cases, the disaster usually has only a localized impact, meaning that places outside the site of accident will not be affected by the disaster.

On the other hand, the cause of mass casualties might be a big disaster, such as a big earthquake, thyphoon, floods, etc. In these cases, the existing local administration and facilities might not function as it should be.

Since mass disaster occur unexpectedly and suddenly, the existing local administration and facilities usually cannot cope with the burden and responsibility of handling the disaster's victim's. So assistance from the regional or even national level is a must.

In situations where political and security problems are involved, the disaster must be handled specifically, as the armed forces have to take over the responsibility.

The purpose of this paper is to high-light in great outline the problems of management of mass casualties disasters.

## PREPARATION AND PREPAREDNESS

Motto: "HOPE FOR THE BEST, BUT PREPARE FOR THE WORST"

To be able to make plans and to take steps towards management preparedness, one should first of all make a pre-estimation of the disaster possibilities, for every country or region, depending on the situation and condition, covering the political, social, economical, industrial, geographical, factors, etc.

This pre-estimation necessary to make *Models of various kinds of disaster management*, to set up priorities and to avoid unnecessary steps of preparation for a *to remote* type of disaster. This is very important, especially for developing countries, because of the scarcity of resources.

The first and most important part of preparation is the setting up of organizations at various levels, at national, regional as well as at subregional levels.

The main tasks of these organizations are as follows :

1. To make policies, relevant to each level.
2. To coordinate institutions (governmental as well as private) and the community, which are regarded and expected to have some role in the disaster management.
3. To stimulate (and maybe to organize training)
4. To initiate exercises of different types of disaster management.

In the *pre disaster period* this organization is mainly a *skeleton organization*, staffed as small as possible, but with a clearcut and thorough division of tasks and responsibilities in all sectors, which might have a certain role in the disaster management, should a disaster occur.

To set up policies means to describe procedures, managerial as well as technical. These procedures are very important to prevent confusion, friction, overlappings and gaps. These procedures should be a consensus, simple and easy to understand.

Concerning the medical procedures, these should be standardized to prevent different methods of handling similar cases by different people.

At the top of the organization, at different levels, there should be

a *control center*, which has the ability to monitor developments of events twenty-four hours a day and in case of emergency to actuate steps, with the necessary speed and accuracy.

*National disaster control center at national level*  
*Regional disaster control at regional level*

In order to ensure that these control centers can function properly, these centers must be supported by an adequate communication system.

Exercise is one of the most essential activity that should be carried out in the *pre disaster* period, for the purpose of familiarization and indoctrination of all the procedures, to enhance the speed and accuracy of action.

These exercise should be done regularly and continuously.

In the management of *mass casualties*, *education* and training of laymen is a very crucial and important activity that should be given first priority, and executed regularly and systematically. This training should be carried out nation wide, based on governmental policy.

It has been mentioned above that every sector in the society should be given their respective and proper roles. A few words will be dedicated to the role of armed forces.

In situations where *mass casualties* occur because of political and security disorders, the armed forces will take over to handle the situation. The *management of mass casualties*, will be executed mainly by the armed forces health services.

In situations where there are no political issues or security disorders, the main role should be given to civilians. The armed forces should be involved only if it is regarded necessary. Nevertheless, where *speed power* and *mobility* is needed, the armed forces health service can always be involved, since they are used to surprise and are backed up by an adequate logistic system.

After all that has been mentioned above one should not forget, that the success of *handling mass casualties*, will mostly depend on the preparation and preparedness of those handling it.

## ON SITE MANAGEMENT OF MASS CASULTIES

Basically, the management of mass casualties follows the same

pattern and phases as the management of critically ill patients in general, that is :

- Resuscitation,
- Stabilization (stop bleeding, splinting, etc)
- Transportation
- Emergency treatment
- Definite treatment/intensive care.

Nevertheless, since mass casualties occur unexpectedly, involving many people at the same time, it does have certain peculiarities in the management.

In order to secure the success of the management of mass casualties, the pre requisites should be fulfilled before the disaster takes place. This pre requisites is nothing else but the preparation work and activity, and the high standard of preparedness. This matter has been discussed above.

Certain principles have to be adhered to, on the site of the disaster.

1. The management of casualties must be carried out under *one command*, which is accepted and observed by every one taking part in the salvation of the victims. Whoever will in command does not really matter, as long as he is capable; even so it is preferable to have a consensus during the preparation period. The person in command is the one who makes sure that all procedures, managerial as well as medical, will be carried out accordingly. A command post should be erected on site, to control and coordinate all activities. Communication takes place from here to Hospitals, Ambulans Stations, Regional Control Center, etc.
2. The site of the disaster should be regarded and treated as a *restricted area*, where not everyone can come and go as he likes. Special treatment *should be given to relatives of possible victims*, they should be localized outside the site of disaster and given the necessary information as true and sincere as possible. Everybody on the site of accident should be subordinated to the commander in charge.
3. In order *to give the right treatment to the right people* with the limited skilled personel, TRIAGE is a must. (I do not want to

dwell further upon the problem of TRIAGE, because this is familiar to all of the participants of this meeting).

4. First aid, is usually given by laymen, (in certain countries these are fire men, since their work is mostly closely related, with rescue work). That is why the importance of education and training of the laymen cannot be over emphasized.
5. The victim is then *transported*, by carrying or by using litters to the *case holding station*. Here again TRIAGE is done, further treatment given where necessary, the victims stabilized and prepared for further transportation. One thing should not be forgotten, the *medical record* of every patient should be filled properly and sent along with the patients to the hospital.

#### 6. Transportation of patients

From the time a disaster is acknowledged every ambulance in the area should be kept on first degree alertness. The route of ambulances to the site of accident (the coming-in and going-out) should be decided wisely in order to avoid traffic jams. Where ever possible, for places like sport stadiums, high rise buildings, hotels, etc, the ambulance route should be decided during the predisaster period.

#### 7. Hospitals

Like ambulances, hospitals should be given first notice wherever a disaster has taken place. Data of hospitals with emergency capabilities should be known in advance, like the capability of surgical treatment and intensive care. These data, along with ambulance data should be recorded in the *operation room* of the control center who will dispatch victims to the right hospitals. Where local hospitals cannot cope with the burden, it is preferable that air transportation is available for transportation to further and better hospitals.

#### 8. The role of disaster control center

It is easy to understand, that in most cases, the local medical facilities will not be able to cope with the burden imposed by the major disasters. In this case, the regional control center has to assist the local authority with the necessary supplies and manpower, by mobilizing regional resources or asking the national control center for assistance.

**SUMMARY**

The main problems of management of large scale casualties has been highlighted. It covers the problems in the preparational period and the on site management proper. The author is of the opinion, that successful management is only possible when preparation is adequate and high degree of preparedness is available.

Jakarta, 17 October 1987.

# MENTAL HEALTH ASPECT OF DISASTER

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"We also need to develop and institutionalize a disaster culture of norm, procedures, and clearly defined role responsibilities, that can prepare people as individual, families, and communities to cope well with disasters and other kinds of crisis situations"

(MAX SIPORIN)

## I. INTRODUCTION

### 1. Accidents and disasters

Accidents and disasters are sudden, unexpected and unpredicted events which jeopardize and threaten human life and existence and cause considerable sufferings, specifically injuries, pains, distress invalidities and deaths.

Accidents and disasters are contributing factors in increasing morbidity and mortality rates and invalidities. The more so, with the advancement of technology and the process of modernization, accidents and disaster are ever increasing and on the other hand natural disaster remain unprevented.

Therefore prevention of accident and man-made disaster preparedness and aids becoming more and more urgent.

Accidents and disasters sometimes can hardly be differentiated as a rule of thumb one may say that if an accident involving many people (for instance more than 25 persons) may be called a disaster of catastrophe.

For example :

- |                             |   |                                   |
|-----------------------------|---|-----------------------------------|
| - vehicle collision         | ) |                                   |
| ship sunken                 | ) | traffic accidents                 |
| - aeroplane crash           | ) |                                   |
| - falls                     | ) |                                   |
| burns                       | ) |                                   |
| - poisoning                 | ) | home accidents                    |
| - suicide                   | ) |                                   |
| - Bhopal accident           | ) |                                   |
| - Chernobil accident        | ) | industrial accidents or disasters |
| - landslide                 | ) |                                   |
| - fire                      | ) |                                   |
| - flood                     | ) |                                   |
| drought                     | ) |                                   |
| - starvation                | ) | man-made disasters                |
| - war, rioting              | ) |                                   |
| - terrorism, hi/sky-jacking | ) |                                   |
| - epidemics, pandemics      | ) |                                   |
| - volcanic eruption         | ) |                                   |
| - earthquake                | ) | natural disasters                 |
| - tornado                   | ) |                                   |

Man-made disasters are usually preventable and avoidable, whereas natural disasters can only forecast, so that men can maintain preparedness to organize an immediate and appropriate rescue operation to reduce the number of victims and its consequences which may loom high had if not been so organized.

## 2. The impact of disaster to human suffering

The induced morbidity and mortality may be direct and indirect in nature. The indirect cause will depend on the manner people initiate the preventive efforts, whereas against the natural disasters which are unpreventable we may be prepared an armed to withstand them. Consequently morbidity and mortality rates can be reduced through preventive and preparatory measures so that immediate rescue can be delivered.

From the mental health viewpoint, disasters are contributing factors causing stresses or act as stressors in inducing mental disturbances.



## **II. MENTAL HEALTH VIEW TO DISASTER**

### **1. Man in disaster**

Mental health tends to view accidents or disasters towards its implication to human beings, to those who become the victims or to those who are fortunate enough to escape from the impact (survivor), irrespective of whether they are relatives of the victims or those who may extend helps to the suffering fellowmen.

In the management of disaster preparedness, one may divide one's own thought into three very important periods:

- Pre-disaster periods (warning phase and threatening)
- The impact periods (primary and secondary impact phase)
- Post-disaster periods (first aid, evacuation, medical aid and rehabilitation)

As to the locality, one may think of :

- Filter area (area whence direct aids originated)
- Surrounding area and other community whence aid will come in shower pace.

The ability of men to master environment and resources are important factors in the emergence, prevention of accidents, preparedness to disaster and management of disaster aid. This ability in turn is dependent on several other factors like :

#### **1) Level of knowledge and skill**

Level of intelligence (IQ), a mentally retarded child may easily caught in an accident rather than its normal or intelligent counterpart.

Education and training, the more highly educated and trained one and will have more skill in accident prevention and utilization of resources.

#### **2) Level of health**

The level of health will generally determines human response facing the disaster, whether he or she will stay passively due to suffering or invalidity, or as normal common response to :

- physical exhaustion weakness, lowering of consciousness such as drowsiness due to lack of adequate sleep, the administration

of sedatives or hypnotics, abuse of alcohol, narcotics and other additive substances.

- specific health conditions due to disease which will affect human general condition from time to time, such as epilepsy, uncontrolled diabetes mellitus.

### 3) Personality and behaviour

Human personality and behaviour play very important roles in the induction of accidents and the reaction to crisis situation such as disaster. Included here is the abiding tendency to the regulations and laws such as in road-traffic safety, occupational hazard, airtraffic, and navigation. Human emotion, calmness, and certain personality types may also contribute to accidents prevention. This factors not only concern the victim, but also other people involved in the chain of accident production, like driver, technician, passengers, workers, law enforcement personnel, parent, etc.

## 2. Mental Health Approach.

Mental health proposes to view a human being as a complete integrated totality of organobiological, psycho-educative and sociocultural coalescence (an eclectic holistic approach), and strive to achieve a condition which permits the optimal physical, emotional and intellectual development of an individual which is compatible with other individuals. in the society, to be free from disease, having adequate resilience against stress and able to maintain a harmonious living with the environment (physical and non-physical). This condition is in accordance with the definition of health as stated in the Indonesia Law on Health Principles No. 9, 1960, and also the definition of Mental Health according to the Indonesian Law on mental Health No. 3, 1966.

Therefore, in the preventive endeavour and disaster management, we are always in cognizance of the above elements of organobiological, psycho-educative and socio-cultural factors.

### 3. Disaster as stressor or crisis -

Accidents or disasters can act as stressors to men, physically, mentally as well as psychosocially. According to mental health, psychosocial stress as a result of disaster is considerably high. This stress is caused by :

- directly by the nature of the disaster itself causing fear and panic;
- due to the physical injuries, tissue destruction, and invalidities;
- Loss of property, family members, relatives.

The intensity of stress felt is dependent on.:

- nature and severity of the disaster or its aftermath;
- individual resilience to stress, the latter seems to have close relation to the degree of individual mental health; as a person who are mentally healthy, usually has a greater resilience to stress and in a positive way, preventing the emergence of a distress situation causing further mental disturbance.

Disaster in mental health view, is an extreme social crisis situation in which individuals and their social system become dysfunctional and disorganized, sustain personal, collective, and public hardship, and also become a community of sufferers.

Like other crisis, disaster involves a stressor event, a roller coaster process to recovery, and time limited progression of phased task. And the recovery process is influenced by a number of factors psychosocial, internal, and environmental.

#### 4. Primary Prevention in Mental Health

Hollister (1979) proposed prevention efforts according to mental health principles based on stress model :

(1)	(2)	(3)	(4)
Stimuli (Stressor)	Organisma (individual)	Response (defence mechanisme)	
Stimuli that threaten our survival or emotional need	Stress Internal response experienced when subjected to stressor	External response	

Using Hollister's model one can try to visualize intervention strategy as above.

Stress (distress) may be defined as the internal response experienced when subjected to stressors.

Stressors are stimuli that threaten survival and emotional needs. Many kinds of psychological stressors exist in life, including disasters. There are 4 strategies of primary prevention in mental health base on the stress model, i.e. :

- (1) Stressor management intervention  
Where the focus is on managing the stimuli before they have an impact on persons, this programme is designed to decrease or modify some or all of the stressors that might create disturbances in specific target groups.
- (2) Stressor avoidance intervention  
This is based on keeping vulnerable person from experiencing the impact of harmful stressors, that is, to arrange to withdraw them from potentially disabling situations or encounters.
- (3) Stress resistance building  
The effort is to mobilize strength-building experiences that will enable persons in the target groups to resist more readily the effect of stress. Anticipatory guidance is a type of this strategy. Skippen and Leonard, Broussard point the importance of social port as a moderator of life stress and as protections against the development of reactions to stress. Spivach and Shuren (1977) focus on increasing coping skills.
- (4) Stress reaction management  
To prevent progression of a problems once the person has already felt the impact of stress (overlapping with secondary prevention).

### **III. HUMAN RESPONSE TO DISASTER**

#### **1. Immediate response**

The human response to disaster could be divided into 2 groups, the immediate and delayed reaction.

Various reactions may be experienced by individuals in a disaster. Shock and dismay that such disaster could happen, followed by tenseness and lethargy, the next few weeks or months, alternatingly feeling of despair and hope. This often happens among the victims and many of them could survive, their conditions could be improved much more by receiving helps from mental health sector in the right time and manner.

The are four areas of concern

- 1) The response to warning of threat in which an interpretation of danger has to be made by aggregates of people,
- 2) The action (reaction), preventive and otherwise, that persons take when danger is imminent (immediate reaction to threat),
- 3) The reactions of persons in the immediate post impact situation (immediate reaction to impact),
- 4) The handling of loss of persons or of property (coping with loss).

Assumptions are often made that the typical patterns of response to threat take the form of panic, shock and passivity. Although that view is widespread, even among personnel of disaster organizations, it is generally a misconception according to almost all systematic studies conducted, solo and collective panic flight, in fact, is so rare a problem. Also persons involved in disasters are seldom so stunned or shocked that they cannot adaptively respond, nor do victims lack initiative. Instead, they generally assess with others the demands of immediate situation facing them.

There are some limited evidence of what has been called a disaster syndrome, that is a state of shock leading to regression in normal cognitive processes. However, it appears only in more traumatic and sudden kind of catastrophe, is confined to post impact period and last only for a short time (minutes or hours), and does not occur in a large scale.

## 2. Response after a stressful event

The delayed reactions which develop later may be the emergence of a mental disturbance, called the Post-traumatic Stress Disorder (according to DSM-III or the Indonesian Diagnostic Classification and Glossary of Mental Disorders II, which was previously termed the Gross Stress Reaction. Also similar to the Catastrophic stress, or combat fatigue). The post-traumatic Stress Disorders are again subdivided into several subtypes :

- Acute (308.30): which develop within 6 months after the accident
- Chronic (309.81): whose development is delayed beyond 6 months of the accident.

The subtypes may be characterized by:

- (a) a disturbance of emotion (308.0)
- (b) a disturbance of consciousness (308.1)
- (c) a disturbance of psychomotor function (308.2).

Besides, mental health will pay attention to the possible occurrence of Organic Mental Disorders due to head injuries in accident and disaster.

#### **IV. MEETING MENTAL HEALTH NEEDS TO DISASTER**

##### **1. Predisaster preparation**

This is an important and determining factor for the success of the overall disaster management which covers many problems and activities, such as :

- training of professional manpowers and volunteers for immediate relief and rescue operation.
- establishment of necessary human services, including emergency health care system which could at any time respond to any emergencies and the need for immediate referrals.
- establishment of fast and reliable communication and transportation systems.
- establishment of effective multidisciplinary and comprehensive organization.

Mental health could assist in the training of personnel to attend to mental health and psychosocial aspects of the problems, or to generally promote the status of mental health of the community free from mental disturbances, resilient to stress and harmonious living.

##### **2. Crisis intervention and psychiatric treatment**

Clinical assessment of victims of disaster requires careful inquiry into both kinds of deflection from homeostatic state, that is extreme warding-off of the stress event numbing; and intrusive repetitiousness of memories and associations to the stress events with pangs of painful feeling.

There is a general tendency to denial first and then intrusion, in progression of phasic responses to stress. Individual will vary in the order of entry into such phases, time spent in a phase, degree of oscillation between phases, and specific manifestation during any

phase.

According to Horowitz common stress response syndrome can be distinguished by phases although individuals and situations vary, these phases are :

- Initial response of outcry, followed by
- Denial, then
- Intrusion
- Working through, and finally
- Completion

In addition to the orientation according to individual personality, the treatment should be phases oriented and the priorities of treatment should be determined by patient's current state.

To Simplify, a diagramatic representation is here presented :

## 1. Tabulation of Common Stress Response

Systems	Intrusive-repetitive phase	Denial-numbness phase
Perception and attention	Hypervigilance: startle reactions	Blunting of perception and attention Dazed appearance Selective inattention
Conscious representation	Intrusive-repetitive thoughts and behaviors illusion pseudohallucinations nightmares reenactments (direct or symbolic) ruminations	Amnesia (complete or partial); nonexperience
Ideational processing (sequential and simultaneous organization of representations)	Overgeneralization: inability to concentrate on other topics; preoccupation; confusion and disorganization	Denial: loss of reality appropriacy; constriction of associational width; inflexibility of organization of thought
Emotional	Emotional attacks or "pangs" (fear, guilt, rage, shame, sorrow)	Numbness
Somatic	Symptomatic sequelae of chronic fight or readiness (or of exhaustion of such responses)	Tension-inhibition type
Control	If direct are insufficient, other control systems may be activated leading to symptoms such as withdrawal, substitutive or counterphobic behaviors alteration of state of consciousness, or regression. Flight into overactivity is common in the denial phase.	



## 2. A Classification of Treatments for Stress Response Syndromes

Systems	Denial-numbing phase	Intrusive-repetitive phase
To change controlling processes	Reduce controls; interpret defenses; use hypnosis & narcohypnosis suggestion; introduce social pressure and evocative situations (e.f. psychodrama); change attitudes that make controls necessary; uncover interpretations	Supply controls externally; structure time and events for patient; take over ego functions (e.g. organize information); reduce external demands & stimulus levels; encourage rest; provide identification models, group membership, good leadership, orienting values; behavior modification with reward and punishment
To change information processing	Encourage the following: abreaction, association, speech, use of images rather than just words in recollection and fantasy enactments (e.g. role playing, psychodramas, art therapy), reconstructions (to prime memory and associations), maintenance of environmental reminders	Work through and reorganize by clarifying and educative interpretive work; reinforce contrasting ideas (e.g. simple occupational therapy, moral persuasion); remove environmental reminders and triggers; suppress or dissociate thinking (e.g., sedation, tranquilizers, meditation).
To change emotional processing	Encourage catharsis and emotional relationships (to counteract numbness) supply objects	Support: evoke other emotions (e.g., benevolent environment); suppress emotion (e.g. sedation or tranquilizers); desensitization procedures; relaxation and biofeedback.

### 3. Priorities of Treatment Determined by Patient's Current State

Priority	Patient's current state	Treatment goal
First	Under continuing impact of external stress event	Terminate external event or remove patient from continuity with it; provide temporary relationship; help with decisions, plans, or working through
Second	Swings to intolerable levels--ideational-emotional attacks; paralyzing denial and numbness	Reduce amplitude of oscillations to swings of tolerable intensity of ideation and emotion; continue emotional and ideational support; select techniques from Intrusive Repetitive Phases (Table 2)
Third	Frozen in overcontrol state of denial and numbness (with or without intrusive repetitions)	Help patient "dose" reexperience of event and implications (i.e., help to remember for a time, put out of mind for a time, and so on); during periods of recollection, help patient organize as well as express experience; increase sense of safety in therapeutic relationship so patient can resume processing the event.
Fourth	Able to work through, tolerate episode of ideation and waves of emotion	Help patient work through associations (conceptual, emotional, object-relations, and

		self-image implications) of the stress event; help patient relate stress event to prior threats, relationship models, and self-concepts, as well as to future plans
Fifth	Able to work through ideas and emotions on his own	Work through loss of therapeutic relationship terminate treatment.

- \* Horowitz, MJ: Phase-oriented treatment of stress response syndromes. AM J Psychother 27 : 506-515, 1973.

### 3. Altruistic behavior of helpers

Altruistic behavior is an action that does not have expectation of rewarding consequences for the helper . . .It is not a pure motive part of the mixed motives and attitudes that determine human behavior, which can be referred to :

- A general personality trait
- An element of moral character
- A basic innate need
- An attitude, motive, or value, and/or
- A behaviour habit, this also refers to behaviour that is moral and ethical, prosocial and virtuous, i.e. giving to and helping others.

We are aware that altruistic behaviour in the community has now the tendency to decrease, so that it is important for us to maintain this good characteristics, not only in the community but also specifically among the professional helpers.

### 4. Family and community

The role of families and the community in disaster preparedness and management is very big, and this is also the case for Indonesia, where the philosophical ideas of "gotong-royong" and

"good neighbourliness" are still upheld, so that the decisive role of families and community will only need some sort of appropriate guidance and directives to prevent disorganization.

## V. CONCLUSION AND RECOMMENDATION

1. Mental health would view disaster in three areas of interest:
  - (1) The role of human behaviour in the emergence of accidents or disasters,
  - (2) The effect of accidents/disasters on human behaviour and mental health, and
  - (3) The influence of psychosocial factors in preventive measures and disaster management.
2. In the disaster management, mental health may be able to assist in :
  - (1) Promoting the mental health level of the community to strengthen the resilience of the individuals against stress,
  - (2) To encourage health promoting behaviour -- physical and mental -- especially with respect to accident prevention,
  - (3) To specifically assist to victims of accident or disasters with posttraumatic stress syndromes.
3. In the preventive and management process, to give special attention to psychosocial factors affecting the victims, survivors, rescuers and the community.
4. In the post-disaster phase, mental health efforts should focus on the following :
  - (1) Confusion from the disaster itself and added by unwarranted informations, so the right informations based on real facts are useful to smoothen the restoration, and so wiping of all tension and confusion.
  - (2) It is factual that not all survivors can expressed their proper feelings with ease, about their despair, fear, and confusion. They may be expressed in tears, verbal expression or nightmare. A comforting support for easier expression are helpiul to relieve their miseries. More attention should be given to children and the aged or the invalids.
  - (3) Severe disaster usually disrupt normal community life pattern they have no shelter, family separation, and mixed with

strangers, so that their placement according to their needs would be very helpful.

- (4) Some of the survivors may not be able to withstand the stress and show symptoms of certain mental disturbance or post-traumatic stress syndrome, early detection will be needed for quick relief preventing further more disabling disturbance.
- (5) Disaster could impose an extra burden on the community, additional manpower and external resources should be sought to assist them.

## BIBLIOGRAPHY

1. Howard J. Parad, H.L.P. Resnik, Libie G. Parad,: Emergency and Disaster Management, A Mental Health Sourcebook, The Charles Press Publisher Inc. Bowie, Maryland.
2. Morton O. Wangenfeld, Paul V. Lemkau and Balir Justice, : Public Mental Health, Perspective and Prospects, Sage Publications, Beverly Hills/London/New Delhi (Vol. 5, Sage Study in COMMUNITY Mental Health).
3. Pedoman Penggolongan Diagnosis Gangguan Jiwa di Indonesia, Ed. II, 1983 (PPDGJ), Cetakan I, 1985, Direktorat Kesehatan Jiwa, Direktorat Jenderal Pelayanan Medik, Departemen Kesehatan R.I.
4. Diagnostic and Statistical Manual of Mental Disorders, 3rd. Edition, the American Psychiatric Association, 1980.
5. Freedman, Kaplan & Sadock,: Comprehensive Textbook of Psychiatry, 2nd, Ed., William and Wilkins.
6. James C Coleman,: Abnormal Psychology, D.B. Taraporevola Sons & Co, Private Ltd.