

## How to Help Acehnese Helping Themselves? A Note after a Visit with Kobe University Medical Team

ENDROTOMO SUMARGONO<sup>1,2</sup>, YOSHITAKE HAYASHI<sup>3</sup>,  
YUMIE TAMURA<sup>4</sup>, NAOKI NISHIGUCHI<sup>5</sup>, TAKESHI YOSHIDA<sup>6</sup>,  
ATSUSHI WADA<sup>7</sup>, NAOTAKA SHINFUKU<sup>8</sup>, MASAHIRO KUROSAKA<sup>1</sup>  
and SAKAN MAEDA<sup>9</sup>

<sup>1</sup>Department of Orthopaedic Surgery, Kobe University Graduate school of Medicine,

<sup>2</sup>An Indonesian orthopaedic surgeon, visiting Research Fellow,

<sup>3</sup>Department of Molecular Medicine and Medical Genetics, International Center for Medical Research and Treatment (ICMRT), Kobe University Graduate school of Medicine,

<sup>4</sup>Department of Nursing, Faculty of Health Sciences, Kobe University Graduate school of Medicine,

<sup>5</sup>Department of Psychiatry and Neurology, Kobe University Graduate School of Medicine,

<sup>6</sup>Department of Disaster and Emergency Medicine, Kobe University Graduate school of Medicine,

<sup>7</sup>Department of Hospital Pharmacy, School of Medicine, Kobe University,

<sup>8</sup>International Center for Medical Research and Treatment (ICMRT), Kobe University Graduate school of Medicine,

<sup>9</sup>Dean of Kobe University Graduate school of Medicine

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**On December 26, Aceh Province in Indonesia was hit by the worst earthquake and tsunami. A medical team from Kobe University Graduate School of Medicine visited two of the affected areas on the eastern coast of Aceh: Sigli and Lhokseumawe. This article provides a simple description of experience and assessment derived from the visit. The disaster has left Indonesia with complex problems, which will take a long time to overcome. A continuity of the aid and assistance from various resources is crucial to help Indonesia rebuilt the affected areas. These continuous efforts will provide great contribution for Acehnese people to recover and rebuild their life after tsunami.**

### INTRODUCTION

On December 26<sup>th</sup>, 2004, one of the largest recorded earthquake occurred in the Indian Ocean, 150 kilometers west of Aceh Province, Sumatra Island, Indonesia. The earthquake was registered at a magnitude of 9.0 on Richter scale. The earthquake had caused a gigantic tsunami, traveled 1000 kilometers in 2 hours, destroying a coastal area throughout the Indian Ocean and hit numerous countries such as Srilangka, India, Thailand, Bangladesh, as well as other Asian and East African countries. Indonesia is among the hardest hit by the tsunami. As January 14, 2005, 110,229 were accounted for dead, 12,132 for missing people and 703,518 for displaced. The damage was considerably severe, and was estimated around US\$ 4.45 billion (1). This disaster had called one of the biggest humanitarian relief forces ever in the history of natural disaster, from around the world.

Kobe University Graduate School of Medicine sent a medical team for a short visit to Aceh. The motivation of this article is to share the experience from the visit. Such a short visit is certainly not sufficient for a formal and complete assessment of the situation, however it would be a concise assessment to provide Kobe University Graduate School of Medicine as to what further assistance that Kobe University Graduate School of Medicine could provide to the disaster area (i.e., Acehnese people). Conditions and some present problems that the team had observed from the particular areas during our visit would be highlighted accordingly. Based on these observations, we would like to share ideas on what could be done to further assist and help Aceh in the future. The focus of our observation would be given particularly to health related problems faced by the survivors.

### **PLACES VISITED**

The Kobe medical team flew to Banda Aceh, the capital city of Aceh province, and then continued the journey to Sigli and Lhokseumawe by car. Banda Aceh is situated on the western coast and was one of the worst affected areas by the tsunami. The affected areas were left in a total devastated state. The tsunami reached up to 5 kilometers inland, brought immense sea water into homes, crushing them and further damaging the road, bridges, telecommunications, electricity system, and others infrastructure in the areas. Large efforts are needed to clean up debris and to recover dead bodies that were buried under rubbles of ruined buildings. When we arrived, many local and foreign relief forces had already flogged the city. We met them at the airport, survivor's camps, hospital, and around the town. Prior to the tsunami, entrance to the province was strictly controlled by the Indonesian National Military Forces. Aceh Province has been declared as an area of conflict for many years between the Indonesian National Military Forces and the freedom fighters seeking independence of Aceh from Indonesia.

### **CURRENT RELIEF PROGRAMS AND SOME NEED ASSESSMENT**

One of the aims of the visit is to consider possibilities in which Kobe University could provide assistance to Acehnese through local institutions. To achieve this objective, Kobe team was cooperating with a local team from Dr. Soetomo Hospital/Airlangga University (hereafter referred to as Airlangga team). Soon after the disaster, Airlangga team has sent a medical relief team and set up camps in two regions within the eastern coast of Aceh, namely Sigli and Lhokseumawe. The impact of tsunami in these two regions were not as severe as that of regions along the western coast of Aceh, however the disaster left thousands of inhabitants homeless and lost their families.

The relief actions being undertaken can generally be divided into two categories, the emergency relief and the recovery relief programs. The concept for the emergency relief follows a refugee health model established by *Medicins Sans Frontieres* (MSF)<sup>1</sup>. Relating to this emergency relief program, the Airlangga team has carried out actions, such as measles campaign and collecting blood sample for evaluation purpose; repeated duster sampling after shelter, water, food, latrines, and waste disposal; active case finding and monitoring survivors' disease (malaria, respiratory tract infection, measles, malnutrition); food

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<sup>1</sup> *The MSF Refugee Health Models Comprises 10 Priorities Activities: (1) initial assessment; (2) measles immunization; (3) water and sanitation; (4) food and nutrition; (5) shelter and site planning; (6) health care in the emergency phase; (7) control of communicable disease; (8) public health surveillance; (9) human resources and training; and (10) coordination*

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provisioning especially for vulnerable population; training on clinical skill and referral system for the nurses and local health care provider and about identification of disease.

By the time we arrived, the progress of the program has reached the initial recovery phase, seen from the construction of temporary shelters that are more permanent than the survivors' camps.

In general, the relief activities by local institutions are organized at *kabupaten* (district level) and *kecamatan* (sub district). The Kobe team had a chance to observe the conditions and to see how it could work more closely in Sigli.

At district level (*kabupaten* level), the programs are focused on promoting the health care performed by the Sigli General Hospital. This hospital becomes the coordination centre of the Airlangga team for their activities in Aceh. Specialist doctors from the Airlangga University and its affiliated hospital come periodically to this hospital.



picture 1 ; Sigli General Hospital's ward

Many patients were hospitalized for various diseases due to impact of the tsunami, among others are severe wound infection, multiple injuries and multiple fractures, severe malaria case with jaundice, tetanus, severe enteritis, and post trauma stress syndrome (PTSD) range from severe insomnia and mental disorder. In general, these cases have gotten adequate first treatment, however the hospital was supported with very minimum facilities. For example, the hospital has only one anesthetics machine which has already some problems with its function. The hospital was not equipped with a ventilator machine.

From the discussion with the hospital's personnel, it appears that in order for the hospital to be optimally functioning, they need the following supports:

1. A complete facilities for an emergency department and basic equipment for an operating theatre. For the emergency department, they still need basic equipment such as trolley and examination bed, mobile examination lamp, sterilization/mini autoclave, minor surgical set, and resuscitation unit. For the operating room, basic

equipments needed are anesthetic machine, ventilator, autoclave and emergency surgery facilities.

2. Ambulance with Basic Live Support facilities for patient transfer, mobility and referral system.
3. Medical drug to deal with malaria, tetanus, respiratory tract infection, diarrhea, and post trauma stress disorder.
4. Field-to-hospital communication, VHF radio system to extra-to-intra hospital network.
5. Human resources improvement. There is shortage of well-trained medical personals. One of potential program in this respect could be training for nurses with intermediate and advance competency. In addition, training facilities also needs to be developed.

At sub district level, *kecamatan* level and other regions below it, relief programs were conducted by primary health centers (*Puskesmas*) and health center at survivors' camp.



picture 2 ; The survivor's camps

One *puskesmas* usually serves one *kecamatan* and during this recovery period it supervises survivors' camps in its respective *kecamatan*. The Airlangga team helped some *puskesmas* promoting health service to affected population, with special attention to pregnant women, elderly and small children. Health care performed by *puskesmas* includes provision of basic necessities, such as food and water, and running a feeding centre. The essential medical supplies brought by the Kobe team, which includes drugs and basic equipments, were channeled by the Airlangga team to some *puskesmas*.

*Puskesmas* plays an important role for the success of emergency and recovery relief programs. However some of the *puskesmas* were destroyed by the tsunami. The Kobe team visited one of them, located at *Trieng Gadeng* area near the coast. It was entirely damaged so

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that health care activities could no longer be performed. Reconstruction is needed, but in this case it should be in a new location as people are still afraid to go near the coast. Relocating and building a new *puskesmas* might be needed than just a renovation at the current location.

Nurses and trained local health provider are in charge at the survivors' camp health centers, where *puskesmas*'s doctors visit periodically. To improve the health care systems, the continuity of training for the nurses and local health providers in identifying disease to prevent outbreak and in active case finding for PTSD should be maintained. A training of basic clinical skill assessment and referral system are also important for the success of the relief program in the affected areas.

The health centers in survivors' camps also perform health campaign, which includes health and hygiene promotion, water sanitation, and vaccination for tetanus, measles, polio, etc. In this respect, these centers are also playing an important role in local surveillance and monitoring communicable diseases.

### PRESENT PROBLEM AND REQUIREMENT FOR THE FUTURE

The aforementioned sections part provide simple description of experiences and assessments derived from the visit to Sigli and Lhokseumawe. The two affected areas are not the worst hit by the disaster; compared to other regions such as Banda Aceh and Meulaboh which were suffering much worse conditions post tsunami. Yet the problems encountered in the field could shed some lights on the general problems and what sort of assistance required in order that Indonesian especially the local Acehnese could help themselves and deal with the disaster.

Perhaps the most imperative assistance should be aimed to prevent worsening conditions among survivors in the camp or other temporary lodging. Most places are with hygienic condition below the acceptable standard; there are problems with clean water, latrines, sanitation, and waste disposal. With such bad hygiene conditions, there is potential for the survivors' health to further deteriorate over time which would make them highly vulnerable to disease. Assistance is therefore needed to improve the hygiene and living conditions of the places where large numbers of displaced people have settled.

Secondly, as noted by some aid agencies, such as World Food Program (2), nutritional status of many people in Aceh is of concern, especially of those small children. Yet there is insufficient availability of nutritious food, i.e. rich in micro nutrients, fats and protein. Appropriate food for small children is notably rarely available. Therefore immediate assistance is needed to provide survivors, especially the small children, pregnant women and elderly, with more nutritious food to prevent them from worsening health condition.

Other fundamental problem is access to community health service which is characterized by insufficient number of health facilities as well as health care staffs. The problem actually has been presented in Aceh, particularly in rural areas, before the tsunami. As noted in one of Consultation Group on Indonesia (CGI) report, health centers service utilization by the community in general has been low partly due to inadequate healthcare staff. Many of them fled from conflict area to big cities, such as Banda Aceh. This could be one factor contributing to low health status of Aceh people. The tsunami further deteriorated the already unfortunate conditions of the area. Some hospitals, health centers, health care offices, including port health care facilities were damaged partly or even completely by the tsunami. Therefore, major renovation of health facilities is needed for the recovery of Aceh. Not only that, assistance is also needed to develop human capital by recruiting and training permanent and temporary doctors and other health care staffs. While emergency actions are gradually

phasing out, one of main tasks at the stage of recovery would be providing basic health care services.

Concern should also be addressed to children survivors. The tsunami left thousands of children, without parents and homes. They are perhaps more vulnerable than adults. Children are smaller, weaker, and more susceptible to disease. They are also at greater risk from post-traumatic stress disorder than adults. At that time, UNICEF and other social organizations already have initiated emergency actions, such as running temporary school in tents and providing teaching volunteers. However, it is desirable that those emergency actions to be developed in the near future. It is ideal, for example, to have a comprehensive plan for a children welfare centre which provides facilities such as class room, library, play ground, and outpatient clinic. Psychiatric training course for medical staffs in affected area is also deemed necessary.

The disaster has left Indonesian, particularly the Acehnese with the complex problems which would take a long time to recover. To help them, continuity of the aid and assistance from various resources is crucial. Regarding to this, Kobe University recently has sent subsequent medical team and medical supplies to Aceh. These continued efforts will provide great contribution to helping Aceh people find their way to help themselves.

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