On the morning of 26 December 2004, at about 6:25 am, tremors of the massive earthquake which struck the west of northern Sumatra were felt in the Maldives for about 5 minutes. Shortly after 9:20 am, tsunamis struck the islands of the Maldives.

Tidal waves ranging from 4 to 12 feet were reported in all parts of the country. The Maldives being a low lying country with highest elevation mere 1.5 meters above sea level was affected critically. All the 198 islands of the Maldives had some effect of the tsunami, some destroyed altogether. We are vulnerable due to many reasons as 88 of the widely dispersed not easily accessible islands record perennial beach erosions, and dependence of our economy on tourism and have high import dependence. One third of the population of about 280,000 was affected by the tsunami, the highest comparative figure to other countries. Although the Maldives comprises 300 square kilometres more than 90 percentage of the area is sea. The death toll reached 82, the highest in the history of the Maldives in one disaster, apart from 26 missing. The total numbers of homeless were 1313, with 6650 homeless in their own islands and 4918, displaced to other islands. A total of 13 islands have to be evacuated totally.

There was widespread social devastation, the health infrastructure being affected enormously, with one regional hospital, two atoll hospitals and twenty health centres totally destroyed. Apart from this twenty health posts and ten family health sections were destroyed in the tsunami. It was a huge loss to the developing health infrastructure of the Maldives.

Apart from this other social devastations like destroying of about 50 schools affecting nearly 3000 students, forcing the government to delay the commencement of the academic year for about a month, the time for repair of the damages and rebuilding of temporary schools, and educational requirements.

The worst devastation of all was the psychosocial damage, where the Maldives does not have the capacity nor the resources for those affected. Thanks to the external help in the training of the human resources to deal the emergency situation with quick, psychological first aid programmes. It is expected the psychological trauma of the affected population will take a long time to heal and we need long term constructive programmes to deal with the situation.

We had several constrained to respond to the immediate need for assistance. Firstly we lack a National Disaster Management Plan—just one month prior to the tsunami we started to develop a National plan to respond to emergencies, but with the tsunami we learned more lessons than the two day workshop. The most important lesson we learned was we should not depend on the existing communication systems in case of
emergencies. Communication to the affected islands took more than 24 hrs to be established fully, and a high usage rate during the disaster it was difficult to reach the key persons.

The Maldives had an established Airport Emergency plan with regular drills which is usually adapted in other emergencies as well. At the tertiary care level, adaptation of this plan made the requirement of attending to injuries prompt and adequate. Within 15 minutes of the tsunami there was an airport emergency due to the drift of the sea plan which was about to take off from the airport. The first major injuries brought to the hospital were these patients which included foreigners as well.

On the day of disaster the government formed the National Disaster Management Centre (NDMC), to bring all the stakeholders under one roof, so that the duplication of information as well as well as logistics for delivering of goods and services to the affected areas will take place in a coordinated manner. The Centre was managed by a ministerial committee who meets at least once a day to discuss the progress of the relief operations and recommend the strategy to be adopted for the next day.

The Health Relief Team of the NDMC was under the Minister of Health, which provides apart from emergency medical care, surveillance of diseases, water and sanitation aspects of the affected islands, psychosocial support to the population and provision of adequate medical supplies, International help for health relief and Aid coordination.

The main work of the health relief team was apart from arranging the injured to be attended by the specialised care and to initiate and dispatch medical relief supplies. It also initiate surveillance for epidemics, establish contact with all health facilities, initiate and conduct psychosocial support services, and continue damage reporting.

In the immediate emergency and the recovery needs provision of adequate clean water supply to the affected areas were the major need. Water supplies were disrupted and contaminated, making clean drinking water difficult to obtain. Sanitation facilities and sewage treatment works were damaged. Food supply was almost nil, in major disaster hit islands as whole supplies to the islands were washed away. All of which could potentially contribute to diarrhoeal disease outbreaks, particularly in the temporary camps, which lacked adequate sanitation for accommodating an increasing amount of displaced people. Measles and acute respiratory infection, easily transmitted in overcrowded camps were feared.

The Health relief team conducted well planned health and hygiene programmes using local radio and television. Later this was extended to involve the psychosocial support.

When the immediate need was attended, the strategy was to focus on the intermediate needs. It includes:-

- Continue medical relief and psychosocial support
- Damage Assessment
- Outbreak response
- Water and sanitation assessment
- Dispatch medical supplies
- Dispatch water
- Coordinate international medical relief efforts
- Initiate and monitor outreach medical teams
- Manage medical and water relief supplies

There was a delayed response plan for operationalising affected health facilities, rebuilding affected facilities, rebuilding affected water and sanitation systems and reverting back to normal operations.

The most difficult challenge especially logistically was to provide safe drinking water to the affected islands. Most of the islands the existing water supply was either contaminated or washed away. The provision of water tanks was beyond the existing logistics at a time of crisis. Therefore it was decided to distribute mineralized drinking water bottles, until a logistically viable solution is possible. Later when the external help arrives they were provided with collapsible bladders and desalinated water facility.

Psychosocial support service was given a top priority for the affected population, as although those with injuries at this stage were minor and well attended, the psychological trauma was immense to the whole population, especially the women and the children. Carefully planned programmes involving local NGO’s and volunteers, together with external support for human resources the programmes at the affected islands did a good job in making the population accept the situation and return to their normal daily activities.

Restoration of damaged health facilities was started as soon as the damage assessment was finalized. This together with strengthening of the existing public health programmes especially targeted to the vulnerable groups of women and children in reproductive health as well as good nutrition programmes, was found to be well acceptable by the affected population.

Although lack of capacity, both physically as well as human resources was noticed in all these aspects the programmes were run, efficiently and in an applaudable manner.

WHO acted promptly in response to the tsunami by working in conjunction with the Ministry of Health, other UN agencies and NGO’s, by placing due emphasis to supporting the MoH on establishing disease surveillance and a subsequent system of stringent monitoring measures to ensure adequate and immediate outbreak response. It also provided Emergency Health Kits, Surgical Kits, ORS and Chlorine. As for manpower technical expertise to the WCO and GoM was rendered in the areas of budget, administration, water and sanitation, health care waste management, mental health, media operations and donor relations, food safety, logistics, epidemiology and disease surveillance, and emergency preparedness and response.
There is a lot we learned from the Tsunami Disaster. For the future disasters we must be prepared well. We need to have an intensive and strategically designed National Emergency response Plan and establishment of tsunami early warning system is needed to avoid a similar human cost in comparable disaster.

The establishment of the NDMC led to the reporting of day to day updates to international and local agencies more easy. There are a lot of resources available from both local as well as foreign donor agencies available on the World Wide Web. The government established a website for the National Disaster Management Centre with updated information on all the aspects of the Tsunami.

As there was expected increase in the diarrhea cases in the post tsunami cases, an adjacent school hall near the hospital in the Capital Male was temporarily modified to accommodate such cases needed for isolation. Although the cases reported were far less than expected we continued to isolate cases to avoid a major epidemic. The same procedures were followed in the atolls.

Apart form Diarrhea the only reported cases worth mentioning in the conference but is not considered as epidemic are ARI’s, mumps and measles. There was a report of the occurrence of a disease in crows with mortality in clear excess of normal expectancy reported to occur in two Southern Islands since 28 December 2004.

Although there was no related human cases reported, MOH decided to take immediate preventive measures by sending a team to the affected area. Report based on virus isolation and electron microscopic characterization indicates presence of Reo-viruses.

The existing system of Airport Emergency plan with regular mock exercises proved very useful as a model for adaptation in an Emergency. The establishment of the National Disaster Management Centre, with all key stakeholders under one roof proved an efficient way of dealing with unnecessary delay of the emergency response. The national friendliness and unity in the time of crisis has lead to the death toll being minimised. To appreciate this Maldivian Government has announced that it will mark every 26th December as the National Unity Day.