

G-61**The Istanbul Straits: An Opportunity for Trade or a Potential for a Major Disaster?**

Mustafa Ataç, MD; Resat Ozkan, Prof. Dr. Ziya Bülent, Captain (R)
Redstar Aviation, Turkey

The Istanbul Strait, connecting the Black Sea to the Sea of Marmara, is a waterway of 17 miles with a width ranging from one to four miles. It resembles a river more than a maritime strait. It has sharp bends with a current from north to south attaining a velocity of five knots at the narrows. The increasing misuse of the Istanbul Strait not only is a danger for the only trade route to the international waters of the six littoral states (Bulgaria, Romania, Moldavia, the Ukraine, Russia, and Georgia), but also presents a threat for the 10-million persons who inhabit Istanbul, which accounts for 55% of Turkey's economy, and historically, ecologically, and naturally is one of the most beautiful cities of our world.

Istanbul is only meters away from a possible disaster spawned by errant navigation through the strait. If one of the ships passing through the Strait was punctured, either by crashing into another ship or by running aground, the resulting explosion could release the destructive power of a small nuclear bomb, destroying an area within a 30 kilometer radius. Such an event could cripple approximately 2-million people who daily cross the Strait with more than 1,400 boats and ferries, despite the two modern bridges. Such an event is likely to happen unless we all concentrate on the safe use of the Istanbul Strait for the sake of our rapidly polluting and disaster-prone world.

Serious warnings in much lesser critical times were given, but no lessons have been learned. In 1998, the Romanian tanker, *Independenta*, collided with a Greek freighter just at the lower end of the Istanbul Strait. The collision caused a massive explosion with terrible consequences. Forty-three sailors were burned alive, windows shattered, and the tanker sank leaving behind a burning lake of crude oil for six weeks and a formation of black smoke over Istanbul for two months. The event resulted in destruction to the fishing industry. Finally, the slick traveled down through the Canakkale Strait of the Aegean Sea and caused environmental damage to countries to the south and west of Turkey.

Another incident occurred in March, 1994, when a Greek Cypriot oil tanker carrying 19-million gallons of crude oil collided with an empty Greek Cypriot cargo ship. This collision left similar damage in its wake, and caused a total halt to navigation of the Strait for nine days.

Hazardous cargo such a petroleum, chemicals, and explosives passing through the Istanbul Strait with a rapidly increasing number of ships and tonnage makes Istanbul prone for a major disaster of our century.

Keywords: explosion; hazardous cargo; hazards; Istanbul; risks; ship collisions; shipping; Turkey

Post-Traumatic Stress Syndrome

Chair: *Hideto Hirotsune*
Tuesday, 11 May, 13:30 hours
Special Lecture I

L1-1**Disaster Stress Reactions**

Katsumasa An, MD

Department of Psychiatry and Neurology, Kobe University School of Medicine, Kobe, Japan

Disaster Stress

- 1) Life-threatening experience
- 2) Bereavement
- 3) Property loss
- 4) Relocation (shelter or temporary housing)

Four Phases of Post-disaster Reaction

- 1) Heroic phase
- 2) Honeymoon phase
- 3) Disillusionment phase
- 4) Re-stabilization phase

Mental Disorders Associated with a Disaster

- 1) Acute Stress Disorder
- 2) Post-Traumatic Stress Disorder
- 3) Manic episode
- 4) Depression
- 5) Brief Reactive Psychosis
- 6) Relapsed Schizophrenia
- 7) Alcoholic Abuse
- 8) Adjustment disorder

Crisis Intervention in Disaster

Keywords: crisis; disasters; interventions; mental disorders; phases; reactions; stress; stressors

L1-2**Psychological Responses of Disaster Workers and Intervention for Secondary Disaster Victims**

Keiji Iwaj, MD

Hyogo Prefectural Center for Mental Health and Welfare, Kobe, Japan

As is often said, "Disaster workers are the secondary disaster victims." But for centuries, we Japanese were making light of psychological effects of disasters on victims, and much less on disaster workers. Although large disasters repeatedly struck and devastated this country, our "ignorance" was not broken until the Hanshin-Awaji earthquake in 1995. In other words, disaster workers were not prepared for the psychological care of disaster victims and themselves; yet they worked against the tough situation caused by this enormous, urban catastrophe that killed over 6,500 people. After the earthquake, the national and local governments established the Disaster Victim Assistance Program (DVAP) to promote mental health for the people who were hit by the earthquake. "Helping helpers" is one of its main goals.