

## The Health Effects of Floods in Pakistan

Mohsin Shah

**Affiliation:** First year Medical Student, CMH Lahore Medical College, Pakistan.

**Address for correspondence:** First year Medical Student, CMH Lahore Medical College, Pakistan. E-mail: [mohsin255@hotmail.com](mailto:mohsin255@hotmail.com)

**Published:** December 02, 2007

**Copyright:** © 2007 Mohsin Shah. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

**Abbreviations:**

**Citation:** Shah M. The Health Effects of Floods in Pakistan. 10/90 Student J 2007. 1 (1): e3.

### Summary:

*Floods are one of the most feared and costly forms of natural disasters affecting mankind, accounting for over 40% of natural worldwide disasters. Water in the form of floods can wreck havoc, ruthlessly taking innocent lives. The recent flooding and torrential rains across the province of Balochistan has left more than 240 dead. Over 2 million people were affected across 15 districts of the province. In this issue in the World in Focus, Mohsin Shah discusses the health effects of the floods in general with a special focus on the recent floods in the province of Balochistan, Pakistan.*

**Introduction:**.....

Floods are one of the most feared and costly forms of natural disaster affecting mankind, accounting for over 40% of natural worldwide disasters.(1,2) Water in the form of floods can wreck havoc, ruthlessly taking innocent lives. Data from health effects of flooding suggest that highest rate of mortality occurs due to drowning, hypothermia, vehicle related accidents and trauma. (3, 4, 5)

Additional health effects include enteric infections as a result of disruption to sewage disposal and safe drinking water infrastructure. (4, 6, 7, 8) Mental health problems in the form of post traumatic stress disorder have also been reported amongst flood victims (2, 3, 6, 7, 8) with the incidence of psychiatric symptoms been directly linked with the dissatisfaction of help received during the floods. (10)

**The Health Effects of the Floods in Pakistan:**.....

In the past, Pakistan has also been a victim of flooding, affecting a large portion of its inhabitants physically, financially and psychologically bringing life to a halt and putting mankind to the ultimate test of survival of the fittest.

Recent flooding and torrential rains across the province of Balochistan has left more than 240 dead. Over 2 million people were affected across 15 districts of the province. Vast areas of land and vital infrastructure got ravaged as floods and cyclone 'yemyin' wreaked mayhem amongst the inhabitants, leaving 250,000

people homeless and another 300,000 displaced. (11)

Some of the top concerns that need to be addressed are lack of clean drinking water, food shortage and the spread of epidemics due to unhygienic conditions. Outbreaks of diseases such as typhoid, malaria, hepatitis A, conjunctivitis, skin infection and gastroenteritis (12) are the most feared. Moreover as the weather turns colder respiratory illnesses will pose an increasing threat especially to children without adequate shelter and clothing.

Even months after the flooding hundreds of thousands of people are still without shelter, sufficient food or medical attention even though a lot of humanitarian organizations are trying their level best to provide relief to the victims in the form of food, safe drinking water, hygiene kits, mobile medical teams to prevent and treat waterborne diseases and shelter materials. But the amount of aid that humanitarian organizations can offer is directly reliant on funding, which has been sluggish to materialize.

**Editor's Note**.....

With respect of natural disasters and their health related consequences, we would like to bring to note the importance of training medical students, nurses and other health care professionals in Disaster Management.

Experience shows that had proper expertise and teams trained in disaster management were available, much of the health related consequences could well

have been prevented and treated timely.

As shown, with respect to floods or other disasters such as earthquakes, often deaths occur due to simple problems such as gastroenteritis and malaria.



Health care professionals, especially medical students and nurses could be trained in identifying simple things such as the degree of dehydration in gastroenteritis and how to administer and give Oral Rehydration Therapy.



With the lack of manpower and expert doctors during natural disasters, medical students and nurses could play a very vital role.

As rightly said by Ayaz and Colleagues in their article published in PLoS Student Forum, "Disaster management is an essential component of medical training, but unfortunately this component is largely missing from medical and nursing curricula.

Our experience shows how a lack of training in disaster management can have unfortunate consequences for both patients and health-care students.

We believe that in countries faced with the risk of natural disasters, a risk that is likely to increase due to global warming, the training of health professionals should be designed with an emphasis on regional disaster management.” (14)

**References**

(1) Ohl, C. A. & Tapsell, S. 2000a, "Flooding and human health", *BMJ*, vol. 321, no. 7270, pp. 1167-1168

(2) Tapsell, S. M. & Tunstall, S. M. 2007, "'I wish I'd never heard of Banbury': The relationship between 'place' and the health impacts from flooding", *Health Place*.

(3) Tunstall, S., Tapsell, S., Green, C., Floyd, P., & George, C. 2006, "**The health effects of flooding: Social research results from England and Wales**", *J. Water Health*, vol. 4, no. 3, pp. 365-380.

(4) Dietz, V. J., Gunn, R. A., & Riegau-Perez, J. G. 1990, "**Health Assessment of the 1985 flood disaster in Puerto Rico**", *Disasters*, vol. 14, pp. 164-170

(5) Vasconcelos, P. 2006, "**Flooding in Europe: a brief review of the health risks**", *Euro.Surveill*, vol. 11, no. 4, p. E060420

(6) Maliljay, J. 1997, "**Floods,**" in *The Public Health Consequences of Disasters*, Oxford University Press, Oxford, pp. 287-301

(7) Reacher, M., McKenzie, K., Lane, C., Nichols, T., Kedge, I., Iversen, A., Hepple, P., Walter, T., Laxton, C., & Simpson, J. 2004a, "**Health impacts of flooding in Lewes: a comparison of reported gastrointestinal and other illness and mental health in flooded and non-flooded households**", *Commun.Dis.Public Health*, vol. 7, no. 1, pp. 39-46.

(8) Kunii, O., Nakamura, S., Abdur, R., & Wakai, S. 2002, "**The impact on health and risk factors of the diarrhoea epidemics in the 1998 Bangladesh floods**", *Public Health*, vol. 116, no. 2, pp. 68-74.

(9) Ahern, M., Kovats, R. S., Wilkinson, P., Few, R., & Matthies, F. 2005, "**Global health impacts of floods: epidemiologic evidence**", *Epidemiol.Rev.*, vol. 27, pp. 36-46

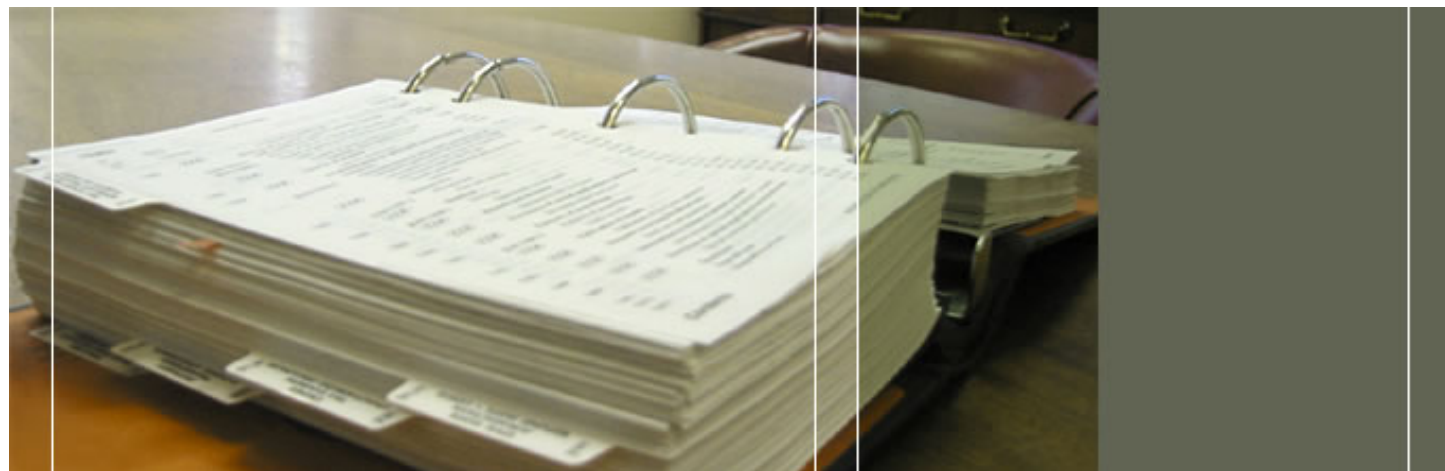
(10) Chae, E. H., Tong, W. K., Rhee, S. J., & Henderson, T. D. 2005, "**The impact of flooding on the mental health of affected people in South Korea**", *Community Ment.Health J.*, vol. 41, no. 6, pp. 633-645.

(11) Abrahams, M. J., Price, J., Whitlock, F. A., & Williams, G. 1976, "**The Brisbane floods, January 1974: their impact on health**", *Med.J.Aust.*, vol. 2, no. 25-26, pp. 936-939

(12) **BBC News on South Asia**. Available from: [http://news.bbc.co.uk/1/hi/world/south\\_asia/6258820.stm](http://news.bbc.co.uk/1/hi/world/south_asia/6258820.stm)

(13) **RedCross News**. Available from: [www.redcross.org.uk/news.asp?id=71361&cache\\_fixer=](http://www.redcross.org.uk/news.asp?id=71361&cache_fixer=)

(14) Sabri AA, Qayyum MA. **Why Medical Students Should Be Trained in Disaster Management: Our Experience of the Kashmir Earthquake**. *PLoS Medicine* Vol. 3, No. 9, e382 doi:10.1371/journal.pmed.0030382



PromotingResearch.com

“ A unique platform for educating young scientists/researchers about important aspects of research ”