

# Dealing with Disaster: Caring for Japan Post 3-11

*October 5, 2011*



*From left to right: Katherine Shear, David Brenner, Gerald L. Curtis, Irwin Redlener, Hugh Patrick*

The Consortium for Japan Relief held a wide-ranging, interdisciplinary symposium on dealing with the aftermath of the March 11, 2011 triple disaster in Tohoku, Japan. Featured panelists included David Brenner, Higgins Professor of Radiation Biophysics at the College of Physicians & Surgeons of Columbia University; Irwin Redlener, Director of the National Center for Disaster Preparedness at Columbia University's Mailman School of Public Health; Gerald L. Curtis, Burgess Professor of Political Science and Director at the Weatherhead East Asian Institute (WEAI) at Columbia University; Hugh Patrick, Robert D. Calkins Professor of International Business Emeritus and Director of the Center on Japanese Economy and Business (CJEB); and M. Katherine Shear, Marion E. Kenworthy Professor of Psychiatry, Columbia University School of Social Work and Columbia University College of Physicians and Surgeons. Lee C. Bollinger, President of Columbia University and Professor of Law at Columbia Law School, and Shigeyuki Hiroki, Ambassador, Consul General of Japan in New York, gave opening remarks.



*President Lee C. Bollinger*

President Bollinger expressed his gratitude and extended his congratulations to the Consortium for raising awareness and encouraging assistance to the affected regions. He remarked that the CJR's response to the Tohoku disaster exemplified the role of the University in tackling current problems that are laden with global repercussions and implications. He also reflected on the academy's responsibility to use its freedom of speech and intellectual independence in this manner.

Ambassador Hiroki added that citizens in the affected regions have been stunned by the swift actions and support of many non-

governmental organizations and individuals, particularly in light of the glacial processes of the Japanese government that continue to impede or slow progress. He singled out messages and donations sent from New York City and Columbia University, which altogether created a sense of solidarity in the aftermath of the crisis.

Professor Brenner gave an overview of the short- and long-term consequences of the release of radioactivity resulting from damage to three nuclear reactor cores at the Fukushima Dai-ichi nuclear power plant complex. Radioactive iodine and cesium, among others, were released into the environment, which can result in increased radiation exposure. Since ionizing radiation has the potential to break DNA strands, it is often seen as the first of many steps in the carcinogenesis process. While the level of radioactive emissions was comparable to that of the Chernobyl disaster in 1986, danger to humans was greatly reduced by prevailing winds which took the emissions primarily over the Pacific Ocean. He pointed out that the radiation exposure to someone in Tokyo today is now essentially no different from what it was before the accident. Going forward, Professor Brenner postulated an extremely small increase in long-term cancer risks for a relatively large pool of people, resulting from a much longer term but very small increase in radiation exposure.



*Ambassador  
Shigeyuki Hiroki*



*Prof. David Brenner*

Although Professor Brenner believed that the government had conveyed realistic information on radiation exposure to the Japanese public, he observed that few residents believed the authorities. He suggested that this degree of public skepticism would also apply after a large scale event in other countries, including the United States. He suggested two approaches to address this problem in the future. One is to have the capability to measure everyone's individual radiation exposure. There is actually a new technology originating at Columbia which provides a measurement quickly, based on fingerstick blood samples, known as RABiT (Rapid Automated Biodosimetry Tool). He also cited public education on radiation exposure as central to dispelling skepticism, pointing specifically to lectures by the University to reassure the American

Ballet Theatre and the Metropolitan Opera crews ahead of their summer tours to Japan this year.

Dr. Redlener continued the discussion by outlining the unmet challenges in dealing with national disasters. Considering Japan's robust national planning for disasters, significant investments in building codes and seawalls and a pervasive culture of citizen engagement in public warning systems, its preparedness for disasters is unparalleled. However, the complex multiplicity of events in this crisis, including the enormous displacement of large segments of the population, resulted in a "mega-disaster." In particular, Redlener saw three specific unmet challenges of this crisis: (1) delayed search and rescue efforts, especially for vulnerable



*Prof. Irwin Redlener*

members of the population; (2) insufficient “psychological first-aid” for residents traumatized by the severity and abruptness of the crisis; and (3) message confusion over the leadership of these rescue efforts, combined with widespread skepticism of citizens towards their government. This implied that any roadmap to recovery in Tohoku should include a number of distinct tracks: (1) social recovery to a new normalcy, including the provision of sustained care for displaced populations; and (2) the creation of preemptive strategies to crisis-mitigation, including a focus on vulnerable populations which had traditionally been the Achilles’ heel of recovery operations; and (3) revamping feedback channels between the country’s leadership and its people.

Dr. Redlener warned against complacency as rescue efforts would likely tail off in the following months, and urged both citizens and leaders to use mega-disasters such as this as catalyzing “wake-up calls” to their imaginations, particularly in the United States. People should overcome a previous cognitive inability to imagine that events like 9/11 or 3/11 could occur and create evidence-informed policies as well as public interest in disaster preparedness.



*Prof. Gerald L. Curtis*

Professor Curtis remarked that the cataclysmic nature of this triple disaster – earthquake, tsunami, and nuclear accident – created a crisis which no government in the world would have been adequately prepared to handle. Nonetheless, the Japanese government's response was too slow and hindered by bureaucratic segmentation and lack of coordination by the political leadership. Moreover, the failure of the government and of TEPCO, the power company that ran the Fukushima Daiichi nuclear energy plant, to convey accurate and timely information to the public about the nuclear disaster undermined public confidence and led to widespread skepticism and cynicism. But the crisis has also revealed Japan's strengths – strong community ties, civility, and a strong civil society with impressive efforts by the business sector and hundreds of thousands of volunteers to help devastated communities recover.

Professor Curtis called for bold, innovative approaches not just to restore Tohoku to its pre-crisis condition – a poor, depopulating region – but to leverage this tragedy to create a new model not just for the Tohoku economy but for the country as a whole. A key to achieving this is to transfer more power and money to local authorities who know better than politicians and bureaucrats in Tokyo what needs to be done.

Speaking on the economic aspects of this “triple disaster,” Professor Patrick said that the crisis was a regional, not a national economic disaster, and more accurately represented a broader, societal crisis. Japanese production and supply-chains had been extremely resilient in spite of supply shocks. Furthermore, as a rich country with abundant human resources, it was well-positioned to pay for the monetary costs of recovery and reconstruction in the disaster zone.



*Prof. Hugh Patrick*

However, according to Professor Patrick, the Japanese should pay heed to its energy policy going forward and in the long run, where a reliance on fossil fuels (taking into account the increasing costs of climate change) are projected to place an extraordinarily high cost-burden on the nation. The disaster had a far-reaching impact on the nuclear energy debate, not just for Japan, but also for the rest of the world. He had hoped that this would be the catalyst that brings about consensus and political coordination in Japan, but unfortunately this has not been the case thus far.



*Prof. Katherine Shear*

Professor Shear stressed the need to care for mental health among the fragile post-3/11 population. She suggested that post-traumatic stress disorder, suicides (a growing phenomenon in this area), and alcohol use-related disorders are emerging in the affected area and are of concern. Most importantly, the mental health system needs to attend to the experience of massive loss and attendant feelings of vulnerability, including the occurrence of complicated grief as another important mental health problem. Consideration of mental health needs should be included in economic planning for the area. While the triple disaster posed significant challenges for the country's mental health system, Professor Shear was impressed by the psychological first aid services, including an effective assessment and monitoring programme. However, she expressed concerns about the unlikely longevity of these processes and stressed the need for adequate support for ongoing mental health services. As such, she called for enormous capacity-building in the region, which she believed should focus on the psychological problems that occur in response to exposure to both severe trauma and massive loss – including loss of ability to provide for family, loss of home and community, and loss of loved ones.

Professor Shear observed that Japanese communitarian cultural and social values, which stress patience, dignity and tenacity (*ganbatte* and *gaman*), are both a source of resilience and a potential liability in both identifying and providing for the legitimate need for help and in receiving adequate mental health services in this severely affected region.

### **Question and answer session:**

The first questioner asked if the radioactive spread after the March 11 crisis could compare to Hiroshima, and the specific health risks that might accrue to children.

Professor Brenner replied that it is difficult to compare the current disaster to that of Hiroshima and Nagasaki, where the radioactive doses were far higher. The Japanese authorities have kept a tab on risks to food contamination, although monitoring work for food has been "spotty at best." Individual risk from radioactive dosages has proven to be almost negligible, but information on population risk is far harder to ascertain since there is insufficient knowledge on what



*Moderator Dean  
Jeanette Takamura*

the effects would be going forward.

Professor Redlener stressed that he remains a firm believer in honesty between governments and the general populace. He asserted the government can communicate uncertainty, and promise to share information as it develops. Under all circumstances, though, government should be an honest voice of calm, credible messages to the public.



*Moderator Prof. Shunichi Homma*

A questioner asked about the role of local governments, media and academia in crisis-recovery efforts.

Professor Curtis said that the media response in Japan is mixed, noting that while the NHK (Japan Broadcasting Corporation) has done extraordinarily well in conveying information to the public whenever it could post-crisis, this has not been the case with information coming from Tepco (Tokyo Electric Power Company) and the government. While specialists from academia have offered help, the lack of synergy between their and the governments' efforts have hampered operations.

In addition, Professor Patrick suggested that the government could employ educational, propagandistic or incentive mechanisms to ameliorate the employment prospects of the region. He disagreed with Shear's emphasis on psychological help, noting that employment may be more crucial post-crisis.

The last questioner asked if there was a difference between the complicated grief experienced in America's 9/11 tragedy and Japan's 3/11 disaster.

Professor Shear replied that while there is a degree of nuanced differences across various situations, in part shaped by cultural circumstances and expectations, there are core similarities between the two incidences of grief. In a follow-up question on future trajectories, she expects this grief to be much more pronounced in the future.

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*From left to right: students Kirsten Homma, Emily Kidder, Daiyu Suzuki, and Yumiko Murai*

Department of East Asian Languages and Cultures (EALAC), NHK – Japanese Legal Studies Association at the School of Law, Department of Orthopedic Surgery, Columbia University Medical Center and individual donors. It was moderated by Professor Jeanette Takamura, Dean of the Columbia University School of Social Work, and Professor Shunichi Homma, Margaret Milliken Hatch Professor of Medicine and Associate Chief of Cardiology at Columbia University Medical Center.

