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Disaster Mental Health

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Disaster Mental Health

Julia Johnsen, MPH

Disasters have mental health implications for a significant proportion of people who experience them. These effects are multifaceted and frequent; they begin early and often last a long time. Why do many disasters have such pervasive and lasting consequences for mental health? The reasons span biological, psychological, and social domains.[1]

What are Disasters?

Disasters can be classified into three categories. ***Natural disasters*** include tornados, floods, and hurricanes. ***Technological disasters*** are catastrophic events that are human-made and include the August 2007 collapse of the I-35W bridge in Minneapolis, Minnesota. The third category is ***mass violence***, which, like technological disasters, are human-made but have the added element of ***intention***. What these events share is the potential to affect many people simultaneously and to engender an array of stressors, including threat to one's own life and physical integrity, exposure to the dead and dying, bereavement, profound loss, social and community disruption, and ongoing hardship.[2]

I35W bridge collapse 2007 STAR TRIBUNE/Minneapolis-St. Paul

Measuring how people are affected by disasters is not easy. Our understanding of how disasters affect individuals and communities is largely shaped by research on traumatic events (broadly defined) across disciplines. While traumatic events are a defining feature of disasters, events that lack the potential to affect many people simultaneously can also be described as traumatic. The public health literature continues to develop as disasters increase in frequency and severity, but remains limited due to the

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Disasters – catastrophic events of all types – shape our lives and communities in profound ways. 2007 brought a number of such events to the Midwest. Over the past year we have fought fires, cleaned up from floods and tornados, witnessed numerous acts of community violence, and we continue the public and private recovery from the Interstate 35W bridge collapse. When we – our communities – experience disaster, the effects can be devastating, with the impact felt across all facets of our lives. Our worldview is challenged and we are faced with having to redefine ourselves, our communities, within the context of our new experiences.

Our building sits at the southwestern corner of the I-35W bridge collapse site. As we watch the rebuilding, we are reminded daily of our friends, neighbors, and colleagues who survived – and those who did not. Since that day in August we have heard countless stories from people who "should have been" on the bridge – but for the grace of something that kept them from leaving work on time, or the traffic that was moving exceptionally slow that day, a minor change in route, schedule, or plans that kept them out of harm's way. We will never have answers to the "why?" questions that surround our experiences with catastrophic events – Why was I spared? Why was my home hit – but my neighbors' home saved? We can only work toward a better understanding of how to minimize the impact of these experiences in our communities, and in our own lives, through our work as public health professionals.

This issue of Healthy Generations was born out of the realization that there is relatively little public health research on collective loss or trauma, although it has long been held to be a defining feature of disasters. This collection of articles offers an exploration of disaster mental health (broadly defined), the issues communities and individuals must face in the protracted post-disaster environment, and some of the public health implications.

Many of the readers of this volume are disaster survivors in their own right. We present this issue with gratitude to those public health workers who find ways to promote our well-being even during the most challenging of times.

Julia Johnsen, MPH and Wendy Hellerstedt, MPH, PhD

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physical, ethical, and resource challenges faced by those who study catastrophic events.

Disasters command that we take action. Communities must plan and prepare before disasters occur and they must respond when they strike. Available data can be used to guide these efforts. Understanding the frequency and impact of traumatic events (in both disaster and non-disaster contexts) on individuals can help inform community disaster preparedness and response planning to minimize the long-term impact of disasters on individual and community health.

Effects of Disasters on Mental Health

The diagnostic definition of a "traumatic event" has changed over the past two decades. The current definition is the most inclusive and defines a traumatic event as one in which "(1) the person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others, and (2) the person's response involved intense fear, helplessness, or horror."[3]

Both natural and human-made disasters cause many similar and predictable reactions. There may be disaster-specific stressors in addition to:

- Concern for basic survival
- Grief over loss of loved ones and loss of property
- Fear/anxiety about personal safety and safety of loved ones
- Sleep disturbances
- Concern about relocation
- Need to talk about the events, even repeatedly
- Need to feel part of the community/recovery efforts

Individuals may also experience specific psychological problems. These may include:

- Acute Stress Disorder
- Posttraumatic Stress Disorder (PTSD)
- Depression
- Bereavement

A 2002 empirical review of 160 samples of disaster victims (60,000 people) revealed additional categories of outcomes experienced by survivors.[2] They included increased health problems, or self-reported somatic complaints; elevated physiological indicators of stress and poor quality of sleep and loss of psychosocial resources, including perceived social support, social embededness, self-efficacy, optimism, and perceived control. Social resources appear to be more vulnerable than psychological resources to the impact of disaster. Victims' social networks are damaged through death, relocation, and declines in social participation. At times, support providers are themselves victims. The need for support may surpass availability.[2]

Assessing the Severity of Impairment: The Effects of Location and Type

In their 2002 review, Norris and colleagues found that location and type of a disaster influenced the severity of its effects. Severe or very severe impairment was observed in 25% of the U.S. samples, 48% of the samples from other developed countries, and 78% of samples from developing countries.[2] Developing countries are at a greater risk for impairment because of the increased severity of many of their disasters and because recovery occurs with fewer resources.

2007 SE Minnesota flood 2008 STAR TRIBUNE/Minneapolis-St. Paul

The same study also found that the samples that had experienced mass violence were severely or very severely impaired (67%) compared to 39% for those who experienced technological disasters and 34% of those assessed after natural disasters.[2] None of the incidents of mass violence were found to have minimal or fleeting effects when survivors were assessed.

The importance of location and resources has also been observed in the US. A study of New Yorkers six months after the terrorists' attacks in September, 2001 found that in the post-disaster context, neighborhood-level income inequality was associated with depression among persons with lower income; this group may be more socially or economically marginalized and dependent on local resources.[4]

How Many People are Affected in the United States?

The National Comorbidity Survey (NCS) provides the only estimates of trauma exposure for a nationwide sample of adults in the United States. From 1990 to 1992 over 2,800 men and 3,000 women were interviewed in their homes and asked about 12 specific types of trauma, such as life-threatening accident, sexual assault, sexual molestation, witnessing a person being injured or killed, fire/natural disaster, combat, or physical assault. The study confirmed previous findings that trauma was a frequent, rather than a rare, occurrence: 61% of men and 51% of women reported at least one traumatic event during their lives. Among those exposed to any trauma, multiple traumatizations were more common than not. The most prevalent events were witnessing someone being injured or killed (36% men, 15% women), being involved in a fire or natural disaster (19% men, 15% women), and being involved in a life-threatening accident (25% men, 14% women).[5] On the basis of available data, it appears that a majority of adults will experience an event that involves intense fear, horror, or helplessness at least once during their lives.[5]

Children's exposure to trauma is a major public health problem with devastating and costly effects on individual children, families and communities.[6,7] Children, like adults, may be exposed to a range of traumatic events, including child

maltreatment, domestic violence, community and school violence, traumatic loss, medical trauma, war-zone and refugee trauma, natural disasters, and terrorism. One study estimates that from 1996 to 1998 more than 5 million children in the U.S. were exposed to some form of severe traumatic event such as physical abuse, domestic and community violence, motor vehicle accidents, medical trauma and natural disasters.[8]

Studies have identified childhood trauma and adversity as a major risk factor for many serious adult mental and physical health problems.[9] The emerging epidemiological literature suggests that traumatic life events increase the risk of certain outcomes, including PTSD, substance abuse, depression, and poor health outcomes.[10] The Adverse Childhood Experiences (ACEs) Study found a strong relationship between the number of ACEs and increased risk for alcoholism, drug abuse, suicide attempts, smoking, poor general and mental health, obesity, sexual promiscuity, and sexually transmitted diseased among adult study participants.[9] These findings underscore the importance of identifying strategies to minimize childhood exposure to traumatic events and to provide timely intervention to prevent future pathology.

Limitations of Disaster Research

Those who study disasters and the impact they have face a number of challenges. Disasters create high-stress environments not conducive to the rigors of good research. Investigators often have to use small, non-representative samples of the affected population. They often have insufficient follow-up time, and frequently do not (or are unable to) use standardized mental or physical health measurement instruments.

Disparities in health outcomes persist in the post-disaster environment. Those with fewer resources disproportionately experience higher rates of short-and long-term psychological impairment and higher levels of community breakdown. Additional research should examine potential mechanisms through which income inequality and other features of the social context may affect mental health in the post-disaster context.

Conclusion

Across the globe disasters are common. Survivors vary in outcomes according to the severity of exposure and personal characteristics. Understanding how to prepare for — and respond to — disasters has the potential to minimize the devastating impact on individuals and communities.

For more information:

National Center for Children Exposed to Violence:
www.nccev.org/resources/statistics.html

National Comorbidity Survey:
www.hcp.med.harvard.edu/ncs/index.php

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Recommendations for an Effective Public Health Disaster Response

Research, practice, and policy experts[1] recommend that effective disaster mental health (DMH) programs should plan to be:

1. **Proactive**: Many variables affect the mental health of a community in situations of disaster and mass violence. These include the quality of communication and coordination among responders, public confidence in leaders, and the accuracy and effectiveness of communications to the public about risks and the appropriate actions to be taken. Response plans should be integrated into local, state, and federal agencies and programs. Training for mental and public health professionals, media, public agencies, government, law enforcement, and others should be ongoing prior to a disaster.
2. **Protective**: In the aftermath of an event, the DMH response should initiate psychological first aid to those who need it, identify those with the greatest needs, and limit inappropriate interventions from professionals.
3. **Pragmatic**: Programs should be pragmatic and culturally competent, enhancing natural resilience and providing tools that enable less-resilient individuals to increase their capacity to prepare for and withstand traumatic events.
4. **Principle-driven**: DMH programs should include ways to increase the evidence-informed principles of safety, efficacy, hope, connectedness, and calming.
5. **Proven**: Programs should monitor those at greatest risk, and evaluate services to establish feedback from the community and an evidence base for future interventions.

A public mental health response goes beyond the provision of individual interventions by assisting communities in building inherent strengths that enhance resilience and recovery, organizing training and supporting natural community groups in helping themselves.[2]

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From Conflict to the United States: Refugee Mental Health

Terra Carey and Jessie Kemmick Pintor

The United Nations Refugee Agency estimated that last year there were 32.8 million refugees, asylum seekers, internally displaced people (those displaced within their native country), returned refugees and stateless people worldwide, including an estimated 25 million children currently uprooted from their homes.[1] Refugees are defined as people who are allowed protection and resettlement in another country because they have "a well-founded fear of persecution in their country of origin because of race, religion, nationality, membership in a particular social group, or political opinion."[2] In 2006, the U.S. resettled more than 41,000 refugees and nearly 100,000 refugees were granted U.S. citizenship.[1] In that same year, Minnesota resettled more than 5,300 refugees, the majority of whom were from Somalia, Ethiopia, and Liberia.[3] Refugees have unique mental health concerns associated with their experiences of war, conflict, and the additional stresses of resettlement.

There are several professionals at the University of Minnesota who have expertise in refugee health. One of them is Cheryl Robertson, PhD, MPH, RN, an Assistant Professor in the School of Nursing, who conducts research on refugee family health, stress and coping, and community strength-based interventions. Robertson's most recent research includes evaluating trauma and coping methods of Somali and Oromo refugee youth and the development of a parenting intervention that offers support for Somali and Oromo mothers. She has also worked with refugees in Bosnia, Uganda, and Liberia and teaches several graduate courses on global health. During a recent interview, Robertson was asked what public health workers should know about the psychosocial issues experienced by those who are recovering from trauma and how to best assist those who have relocated to new communities.

Mandi Proue

Assets and Crises: The Complexity of the Refugee Experience

In order to understand the complexity of the refugee experience, Robertson encourages recognizing that many refugees have had prolonged exposure to conflict and that the processes for recovery and healing vary across individuals. Robertson notes that many of the people who have been exposed to conflict are resilient and, while they may be viewed as victims, they may just as accurately be viewed as survivors. In addition to surviving traumatic events, it is also important to view refugees completely: many were productive members of their native countries, had advanced levels of education, had professional positions, and maintained strong social networks and ties to their communities. They have often left many assets behind and, in many cases, everyone they knew behind. Robertson states that it is important that people who work with refugees not "pathologize the experiences the refugees are having…they are having very normal reactions to a very abnormal situation." Working with refugees means acknowledging not only the traumatic events that brought them to the U.S., but the material, psychological, and emotional assets that made their journeys possible. Understanding the complexity of their experiences will help identify their mental health and readjustment concerns, as well as their coping abilities.

The Refugee Experience for Women

Female refugees may face unique challenges: they may be more likely to experience social isolation, loss of community[4] and depression than non-refugee women and male asylum seekers.[5] While men and women may experience trauma at similar rates, women may experience a greater burden of domestic responsibilities as a result of losing male partners and family members to war. They also must cope with fragmented institutionalized support, which is common in conflict-ridden environments. Many refugees, including women, were also exposed to physical and psychological violence. In a recent publication, Robertson and colleagues describe the struggles of refugee women to maintain responsibility for their families' physical, emotional and financial well-being in their birth countries in the midst of war, chaos, and collapsing infrastructure.[6]

Rebuilding Communities in a New Setting

Trauma is experienced within a community context. Often a community that was once a functioning, healthy group of people is torn apart by tragedy and individuals are forced to make difficult decisions and resort to actions and behaviors they never would have engaged in prior to the traumatic event. Robertson notes, "One of the things that happens, whether it is a natural disaster or a human-made disaster, is that communities get broken apart. So, the very things that have given people

meaning and structure, what they have built their lives around, are often destroyed." It is critical that rebuilding be a community process, Robertson says. Public health professionals must know, understand, and involve the community they are working with. Robertson also highlights the importance of understanding the complexity of refugees' post-conflict experiences. Interventions need to be holistic and reflect community priorities in order to influence the health of resettled populations.

Robertson suggests that the first step public health workers should take to gain a better insight into a certain community is to ask colleagues, community members, clients/patients, physicians and others who serve the members of a particular community who they recognize as leaders and where they go to for help. Robertson states that public health workers must "have an understanding of what is already happening, what people want, what they value, and seeing where one fits within that."

Robertson believes that public health professionals have a unique opportunity to help those recovering from trauma: they are trained to develop, implement, and evaluate community-based interventions. One of the elements she values about public health work is "the tremendous opportunity for independence and creative thinking." She notes that those helping communities recover from trauma need to realize that they might not know exactly what is best for the community at the beginning, but they often have extensive training and genuine concern upon which to rely. Robertson stresses that simply jumping in and trying to figure things out is not difficult: "you simply have to show up, you don't expect people to show up for you. You show up where they are and you try to be of assistance in any way you can."

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Resources for Professionals Who Work with Refugees

American Refugee Committee:
www.arcrelief.org
Center for Victims of Torture:
www.cvt.org/main.php
1-877-265-8775
Center for International Health: Regions Hospital
651-254-4781
651-291-4869 (multilingual)
Community University Health Care Center (CUHCC):
www.ahc.umn.edu/cuhcc/healthcareservices.html
612-638-0700
Hennepin County Medical Centers (HCMC): Medicine Clinics:
612-347-2300
Minnesota Department of Health Refugee Health Program:
www.health.state.mn.us/divs/idepc/refugee/
651-201-5414
Minnesota International Health Volunteers:
www.mihv.org
612-871-3759
Refugee Council USA:
www.rcusa.org
USA for United Nations High Commission for Refugees: The UN Refugee Agency
www.usaforunhcr.org
U.S. Committee for Refugees and Immigrants:
www.uscri.org
Local Associations, Organizations and Refugee Self-Support Agencies: Listing of known Minnesota resources can be found at: http://63.87.127.236/default.html

Short Course in Disaster Behavioral Health

The Center for Public Health Education and Outreach (CPHEO) is offering many short courses for informal and formal students from May 26-June 13, 2008. Among them is a 4-day course by Charles Cook, Executive Director, Louisiana Spirit Hurricane Recovery, that will have students engage in individual and small group exercises to develop an understanding of the impact of disaster on behavioral health and on communities. The course is designed to use real-life scenarios to familiarize participants with the predictable phases of disaster recovery and concepts of behavioral health services after disaster. To find out about this course, and other CPHEO courses, go to http://cpheo.sph.umn.edu.

Waite House: We Are Family

Mary Turck

When the I-35W bridge collapsed into the Mississippi River, people around the world watched the yellow school bus that fell with the bridge. That bus was filled with 50 children and eight young staff members from Waite House, one of Pillsbury United Communities' six neighborhood centers in Minneapolis, Minnesota, along with the bus driver and her two children, all returning from a field trip.

The children call 20-year-old Waite House youth worker, Jeremy Hernández, a hero. He was asleep when the bus got to the bridge, tired after getting up early and spending a long day at the water park with the children. One of the children woke him up when they reached the bridge, and the next thing he heard was a big bang. "I thought we were in a car accident," Jeremy said. "The bus crashed down…then it crashed again and it stopped. You could hear the kids moaning and crying and you couldn't see them because of the dust."

Jeremy reacted instantly, diving for the back door and then directing a speedy evacuation of children, staff, and bus driver. "I just remember grabbing and putting them down, grabbing and putting them down, handing kids to the guys who came to help." Jeremy didn't leave until everyone was off the bus, and then he checked around the bus to make sure that no one was lingering near it.

"They're like my little brothers and sisters," Jeremy said later. "I've been working here for five years. It's like they are a part of me."

Monica Segura, another Waite House youth worker, agrees. "Our youth program is like a big family. We are really close with the kids and their parents. We love every single kid." The young staff members come from the Waite House neighborhood. "I came here when I was a kid," said Monica. "I volunteered, and I've been working here for five years."

The fifty younger children and their older "brothers and sisters" are at Waite House every day. Every day, the staff – including the teenage staff – encourages, prods and praises the younger children into learning lessons in discipline and leadership, practicing cooperation and fair play, and appreciating education. Every day they come together – children born in the United States, children born in Mexico or Somalia, children from all races and many countries.

The focus of Waite House's youth programs, director Francisco Segovia says, is leadership development for youth. The response of the staff members in the moments after the bridge fell show that Waite House youth are leaders.

"Our workers grew up here," says John Richard, head of adult education programs at Waite House. "They are slum kids everybody says are the problem. Some are from immigrant families. It was their cool-headedness and clear thinking that saved the day. If this isn't an example that inner city kids can be part of the solution, not the problem, I don't know what is."

Waite Neighborhood House

Mary Turck is the editor of *Neighborhood Connections: The Newsletter of Pillsbury United Communities' Neighborhood Center.*

Pillsbury United Communities (PUC) was founded in 1879 as part of the Settlement House Movement. Waite House, one of six PUC neighborhood centers, offers a myriad of innovative and unique strength-based programs in the heart of Minneapolis' Phillips neighborhood. Since 1969, the dedicated and diverse staff have provided human services and community building activities to this ever-changing community. For more information about Pillsbury United Communities, visit the web: www.puc-mn.org

Being a Good Neighbor: MCH and Waite House

In September, 2007 the Center for Leadership Education in Maternal and Child Public Health deployed Julia Johnsen, Director of Community Outreach, two research assistants and seven volunteers to Waite House to provide ongoing support to the center and its youth workers for the duration of the academic school year. Waite House staff and MCH staff and volunteers are working together to provide the high level of youth programming the children at Waite House are used to, while responding to the emerging needs of the Waite House family in the wake of this disaster. Knowing our neighbors at Waite House, and understanding their resilience, has been an inspiration and a privilege. To learn what you can do to support Waite House, please contact:

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Sow the Seeds: Co-ops, Shoppers, and Community Unite to Assist Farmers

Carla Kaiser and Kim Kusnier

It was nearly harvest time in southeastern Minnesota, south central Wisconsin and northeastern Iowa. A time for farmers to reap their rewards after tending their crops through the spring and summer growing season. Yet in one dramatic August weekend, the hopes and plans of many organic family farmers went down the drain – literally – when eight to 18 inches of rain fell throughout the Midwest, washing out fields and harvest-ready crops and displacing many farmers from their homes.

According to owner Jai Kellum, Avalanche Organics lost $90,000 in salad greens alone and another $30,000 in other crop losses. "We were days away from harvesting, and it all went under water," Kellum said. Harmony Valley, Featherstone Farm and Driftless Organics – producers, like Avalanche, that the co-ops rely heavily upon to provide their shoppers with fresh, local produce – faced similar economic and emotional turmoil, as did others.

In response, Twin Cities Natural Food Co-ops joined forces with a number of other co-ops nationwide–as well as with local, regional and natural restaurants, businesses and non-profits – to raise money for flood-stricken farmers through the Sow the Seeds Fund. The Institute for Agriculture and Trade Policy (IATP) created the Fund to support local food systems in the Midwest. Their collective efforts brought in more than $375,000.

Co-ops Band Together

In the early fall, 12 Twin Cities food co-ops, together with other co-ops nationwide, raised more than $35,000 within the first few weeks of the initiative through shopper donations and matching contributions. "The outpouring of shopper support was overwhelming," said Barth Anderson, research and education coordinator at the Wedge (a Minneapolis co-op grocery store). "Their contribution can't be underestimated, nor can the amount of compassion they demonstrated." National Cooperative Grocers Association (NCGA), a business services cooperative to which the Twin Cities co-ops belong, also got on board, and urged co-op suppliers to do the same by matching their donations dollar-for-dollar, up to $50,000.

"The organic farmers throughout the Midwest have been our friends and business partners for years," said Kelly Smith, NCGA marketing and communications director. "Our member co-ops and their customer-owners are devoted to supporting these farmers and their products, as their generosity shows. Even our youngest customers were involved – a lemonade stand, created by a group of Minneapolis grade-school-age kids, raised $40 for flooded farmers."

Restaurateurs and Retailers Join in

Slow Food Minnesota (an organization that supports biodiversity in food and appreciation of excellent quality foods) and more than 15 Twin Cities restaurants orchestrated "One Big Night Out" in September 2007, which raised thousands more in flood relief contributions. And Peace Coffee, an initiative of IATP, created a special "Sow the Seeds Blend" to assist farmers. For every pound of coffee sold at the co-ops and other local retailers, IATP contributed $2 to the Fund for a total of $8,440 in flood relief.

Whole Foods Market also jumped on the bandwagon with a $25,000 donation along with a $10,000 match in shopper donations.

"This is truly a remarkable example of how local food systems support local community, and both give back to each other," said Jim Harkness, IATP president. "In this time of great need, consumers have demonstrated how much they value the local farmers who provide great quality food and protect the landscape."

New Efforts Planned for 2008

The Sow the Seeds Fund donated a total of $383,900 to 31 farms in Minnesota, Wisconsin and Iowa. A volunteer advisory committee of agriculture and community leaders dispensed the money, with 100% of individual donations going directly to farmers.

A reception was held on Sunday, January 13, 2008 at the Common Roots Café in Minneapolis to thank all those who contributed, recognize the work of the Sow the Seeds Fund flood relief committee, and allow farmer recipients to meet with supporters. New efforts to support local food systems in 2008 were also discussed.

The Sow the Seeds Fund is an inspiring example of a multi-faceted and productive response to a natural disaster. The livelihoods of organic farmers are vulnerable because their practices depend on collaboration with Mother Nature, without protection of, or enhancement by, chemicals. The Fund is an example of the commitment that many individuals in the Twin Cities have to organic farmers and the high-quality produce they provide for our tables.

Carla Kaiser is with the Institute for Agriculture and Trade Policy and Kim Kusnier is with the National Cooperative Grocers Association.

For more information on flood recovery efforts visit:
www.Minnesotarecovers.org

Public Health and the Media: An Uneasy Partnership During Disasters

Becky Seel

In partnership with public health professionals, journalists play a crucial role in disseminating information during natural and human-made disasters. A tension may exist because journalists and public health professionals have different training, perspectives and goals. During a disaster, public health professionals are concerned with population safety and providing evidence-based information to the public or specialized audiences like decision-makers. While journalists share these concerns in reporting disasters, they also must pay attention to the public's right to know and what will engage the public.

Journalists have been criticized for:

Exaggerating risks and reporting the wrong risks. For example, an analysis of news reports about the 2004 tsunami in the Indian Ocean showed that malaria and cholera risks were heavily reported in about 40% of health-related stories, even though the risk of infectious disease outbreaks was not a problem.[1] Infectious disease outbreaks, while not a high risk, had dramatic news value and engaged the public. Inaccurate reporting can also be a result of miscommunication by public officials who journalists depend upon for their expertise. For example, US DHHS Secretary Michael Leavitt warned against "…the potential for cholera and typhoid that could come as a result of the stagnant water…" in the wake of Hurricanes Katrina and Rita. Leavitt's remarks as an expert and public official were widely reported, even though the diseases were not endemic threats.[2] Hence, a "disaster myth" was born, a failure in health communication initiated by health officials and perpetuated on a massive scale by journalists who did not check facts (or were not trained well enough in health sciences to check their facts).[3]

Engaging in episodic and sensational reporting. Sensationalistic reporting often involves framing individual traumas as separate events without context and without focusing on long-term solutions.[4] Market pressures to report events as they happen and the increasing prevalence of disasters—from an annual worldwide average of approximately 200 in 1987 to 425 natural disasters a year in 2006,—have contributed to the increase in sensational storytelling.[5] Media coverage often mimics the way people process risk by focusing on isolated, episodic and individual events instead of larger, more prevalent threats to public health. Compare the coverage of a rare plane crash to cigarette smoking. The mortality figures associated with smoking in the US are equivalent to one plane crash every day for a year, but they receive a fraction of the news coverage. One reason for this is the "outrage factor." That is, smoking is still viewed by many as a "voluntary" though risky behavior and deaths are therefore "acceptable" as a product of "voluntary" assumption of risk. Disasters, on the other hand, are less "acceptable" especially when the impact is seen as "involuntary."

Presenting graphic images that could contribute to or even induce post-traumatic stress among viewers. Researchers are evaluating whether depression, post-traumatic stress and other mental health disorders could be associated with media coverage of large-scale trauma. It is not clear that there is a causal relationship.

The Media Gives the Public What it Wants and Often What it Needs

John Finnegan, Ph.D., Dean of the School of Public Health and a member of the Health Journalism graduate faculty notes that, "The challenges of human perception are amplified in the media. We don't want to hear about the thousands of commercial airline flights that land safely—but we sure want to know about the anomaly—the plane that doesn't land safely and why." What we hear on the news is not a representative sample of world events. We receive a selective snapshot of events that are sensational, new, and, often, rare.

Finnegan describes media coverage of the I-35W bridge collapse as an example of an anomalous event that "…violates our expectations that we should be safe and secure in the ordinary conduct of our daily business. We all know the risks of driving, but no one expects they should have to fear that the bridge they are driving over may collapse under them." Journalists voice our concerns and use our outrage to pressure public officials to explain what happened and to assure that it will not happen again. The "outrage factor" is not based on an objective assessment of risk, but rather on this powerful sense of violated expectations. The public came to perceive that any of us could have been victims of the I-35W bridge collapse and, spurred by media coverage, there have been many fundraisers for victims and pleas for more official accountability.

Finnegan offered hurricanes Katrina and Rita as nationally televised examples of violated expectations: journalists made clear that the victims were owed disaster-response infrastructures that did not exist. The media made clear that "...the New Orleans political system did not invest in prevention, nor did the federal corps of engineers or FEMA," Finnegan stated. Public health efforts at prevention of large-scale emergencies are often complemented by the outcome of negative news coverage. "The media amplified our expectations of competency and sense of violation and ultimately, it had a positive effect by spotlighting a city that did not get the aid it needs." The media's diligence in investigating responsible parties is a tool for broader systemic change and future efforts in prevention.

Personalizing disasters draws in viewers. Journalists make a mass tragedy understandable through small, concrete, individual stories. By enhancing our understanding of suffering, journalists encourage humanitarian aid. A recent study reported that sympathy and humanitarian donations depend on a reporter's ability to put a name and a face to the victim.

Study participants who faced the photo of an identifiable victim donated more than those who merely read statistics.[6] The most important element associated with donation in this study was not the size of the tragedy, but the emotional response to it.

Public Health and Media: Working Together

Public health professionals must take an active role in seeking out media partners and working with news organizations to educate news directors and journalists about how to 'frame' disaster reporting. There are many examples of effective media partnerships with public health. The media campaign following the 1998 U.S. Embassy bombing in Nairobi, Kenya is a model for a timely and community-based program that was designed to support mental health. "Operation Recovery" was established to educate people about the normal psychological responses to a disaster through television and radio outlets. The campaign had a number of important elements:

- Using the radio, people received on-air counseling and were able to share and experience their reactions publicly with the community;
- News broadcasts were followed by commentaries by mental health professionals. Health professionals continued to be a TV and radio presence for weeks after the event to discuss post-traumatic stress symptoms and disorders; and
- Media programs were aired in three languages.

A survey evaluating the effectiveness of the campaign found that 47% of 400 respondents were aware of the resources; 70% believed that media coverage included messages of hope; and 60% determined that the media supported the psychological recovery of the victims and families.[7] Efforts to treat individuals with post-traumatic stress disorder were improved by ongoing media coverage, 700 trained counselors, and input from community leaders. The campaign was unique because health professionals were incorporated into media news coverage for a sustained period and through multiple outlets.

Media outlets are a necessary link between public health agencies and populations affected by disasters—directly or indirectly—because of their primary role in surveying the environment and disseminating information. The news media generally have the trust of the public and are often responsive to public demands for information 24 hours a day. Widely criticized for 'over exposing' the public to disasters, the media nonetheless are indispensable in alerting and educating the public. Public health professionals and journalists can improve the quality of health reporting by establishing trusting relationships between public health information officers and journalists, facilitating the translation of accurate health information to journalists, and developing a mutual understanding of the demands of both professions. There are programs to train professionals for health reporting. For example, the University of Minnesota offers dual graduate degrees in public health (MPH) and health journalism (MA) (see http://www.sph.umn.edu/education/degrees/dualdegrees/home.html).

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For some tips about collaborating with the media about disaster reporting, go to the Dart Center for Journalism and Trauma at http://www.dartcenter.org/articles/books/child_clinicians_03.html

Lessons from the Field: Children's Mental Health

The Center for Excellence in Children's Mental Health, along with University of Minnesota (UM) and community partners, is once again sponsoring the Lessons from the Field series, focusing on bridging the gap from research to practice in children's mental health. It will be held on the UM Twin Cities campus and broadcast to over 35 host sites in Minnesota. Go to http://www.cmh.umn.edu/events/lessonsfromthefield.html for a list of locations or to register for any of the following:

March 24, 2008 8:30 a.m. to 12:30 p.m.
Impact of Family Violence
Dr. Oliver Williams

May 7, 2008 8:30 a.m. to 12:30 p.m.
Intergenerational Consequences of Attachment
Dr. Miriam Steele

May 7, 2008 1:30 p.m. to 4:30 p.m.
Advanced Practice Seminar
(Afternoon Session – metro only)
Dr. Miriam Steele and Dr. Anne Gearity

The Cost of Caring: Healers' Healing and Resiliency in the Aftermath of Disaster

Julia Johnsen, MPH

This article is based in part on an interview with Tai Mendenhall, PhD, LMFT, Assistant Professor in the Department of Family Medicine and Community Health, University of Minnesota Medical School and Clinical Director of the University of Minnesota Medical Reserve Corps Mental Health Crisis Response team.

Professionals who listen to the stories of fear, pain and suffering of others may feel similar fear, pain and suffering because they care. Emergency care workers, counselors, mental health professionals, medical professionals, clergy, advocate volunteers, and human service workers all are vulnerable to compassion fatigue.

Compassion Fatigue: The Cost of Caring

Compassion fatigue is the emotional residue of exposure to working with those who are suffering, particularly in the aftermath of exposure to traumatic events. Those who work with people who are suffering must contend with common work stressors, and with the emotional impact of their empathic response to the pain and loss experienced by others.

Charles Figley, Ph.D., a trauma expert from Florida State University Traumatology Institute, describes secondary traumatic stress (or compassion stress) among helpers as a set of psychosocial and emotional factors caused by a specific event or series of events indirectly experienced through interactions with a family member, friend, or client. Compassion fatigue is a state of exhaustion and biological, psychological and social dysfunction that results from prolonged exposure to compassion stress. Dr. Tai Mendenhall further describes compassion fatigue as a breaking-down process in which physical, psychological, social, and even spiritual resources are depleted. During and after disasters, people can become exhausted by their indirect exposure to traumatic events through listening to people relate their direct experiences again and again. According to Mendenhall and Figley, compassion fatigue is NOT "burnout," which emerges from the cumulative stress and hassles of work life. Burnout is relatively predictable and a vacation or change of job may help.

First responders are often at risk for both burnout and compassion fatigue even before they are deployed to a disaster. Responders often work in organizational environments where overwork is rewarded and sometimes personal needs may take a backseat to work priorities. According to Mendenhall, first responders share characteristics that increase their risk: they are reluctant to seek help and they tend to under-report symptoms of emotional hurt. Responders typically have a high capacity for empathy, a trait that is correlated with compassion fatigue.[1] Attention to first responders' well-being is an important aspect of disaster preparedness and response.

All professionals who work in the field with disaster victims are at risk for burnout and compassion fatigue. Disaster deployments are unpredictable and include long hours, few creature comforts and often unsafe work and living conditions. Workers may also be exposed to political battles across institutions and sectors, conflicting obligations (fieldwork vs. day job vs. family), and the physical and emotional exhaustion that is associated with working in a disaster or post-disaster field context.[2]

There are human costs associated with compassion fatigue when it is not recognized or is ignored. Job performance goes down, mistakes go up. Morale drops, personal relationships and home life may be negatively affected, personal functioning deteriorates and eventually it can lead to a decline in overall health.

Individual Symptoms of Compassion Fatigue

Compassion fatigue can affect the well-being of individuals on multiple levels.[3]

Physical symptoms include:
- Exhaustion/fatigue
- Insomnia
- Headaches
- Gastrointestinal distress
- Alcohol/drug abuse
- Loss of appetite
- Recurrent health conditions (e.g., colds, headaches)
- Poor self-care (e.g.,, hygiene, appearance)

Psychological symptoms include:
- Irritability/outbursts
- Spontaneous crying
- Poor concentration
- Depression/anxiety/panic
- Capacity for empathy is restricted to fieldwork (i.e., deteriorates with family, friends)
- Overall capacity for empathy declines (leading to apathy)
- Compulsive behaviors such as overspending, overeating, gambling, sexual addictions

Institutional symptoms include:
- Poor work performance
- Irritability with co-workers

Social systems include:
- Increase in family conflict or distance
- Social isolation
- Legal problems, indebtedness

Organizational Symptoms

When compassion fatigue affects a critical mass of workers in one workplace, the organization itself suffers. Chronic absenteeism, spiraling Workers Compensation costs, high turnover rates, friction between employees, and friction between staff and management are among the organizational symptoms that surface, creating additional stress on workers.

Healing an organization takes time, patience, and most important, commitment. Mendenhall says an awareness of compassion fatigue and its far reaching effects must be present at the highest level of management and work its way down to encompass line staff, as well as volunteers. Often, the mistrust that employees feel towards management is not unfounded. Since many caregiving institutions are non-profit, they inherit additional challenges such as low wages, lack of space, high management turnover, and constantly shifting priorities.

Organizational symptoms of compassion fatigue are related to individual symptoms and often represent the aggregate effect of suffering employees. An organization affected by compassion fatigue may develop into a culture that includes:

- High absenteeism
- Constant changes in co-workers' relationships
- Inability for teams to work well together
- Desire among staff members to break company rules
- Outbreaks of aggressive behaviors among staff members
- Inability of staff members to complete assignments and tasks
- Inability of staff members to respect and meet deadlines
- Lack of flexibility among staff members
- Negativism towards management
- Strong reluctance to accept change
- Inability of staff members to believe improvement is possible
- Lack of a vision for the future

What Can be Done to *Prevent* or Repair Compassion Fatigue?

Healing and resiliency are multi-systemic. Mendenhall recommends physical, psychological, social and institutional steps that can minimize compassion fatigue during and after disasters.

Physical Steps

It is important for the worker to be assertive about self-care, take breaks (alone and with others), eat and drink regularly, exercise, and get adequate sleep. For workers who are deployed away from home, it is a good idea to bring creature comforts – this might be a book to read, a stuffed animal, photo, or the 'perfect' pillow.

Psychological Steps

Workers must recognize and honor their humanness and the normalcy of stress reactions, traumatic stories and disaster contexts. Workers should be encouraged to neither minimize nor catastrophize their symptoms. Supervisors and co-workers should encourage one another to seek help when needed.

Social Steps

Workers should establish and maintain support systems. During and after disaster effort, they may have to make a special effort to stay connected with family, friends and colleagues and to stay active in professional and recreational organizations.

Institutional Steps

Employers should talk with workers about what to expect before disaster work, especially with those who are relatively inexperienced. They should encourage responders to talk about their feelings, and create safe opportunities for doing so. Organizations that send responders to disasters should limit deployments to two weeks or less and send replacement teams with a couple of days' overlap to ease the transition from one team to another. In the field, team members should be limited to three to five consecutive working days followed by one to two days of rest. Disaster workers also need opportunities for daily debriefings and/or group processing.

Preventing and recovering from compassion fatigue requires responders to be intentional about their own health and well being in the context of attending to others.

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Join Our MCH Listserv

The Maternal and Child Health Program in the Division of Epidemiology and Community Health in the School of Public Health at the University of Minnesota sponsors the cyfhealth listserv to enhance networks between professionals working to improve the health and well-being of children, adolescents and their families. The listserv can be used to share ideas, new research developments, resources, and event announcements. In addition, the listserv helps inform academicians of the training needs of public health practitioners.

To sign up for the listserv, send an email message to: cyfhealth-request@epi.umn.edu. In the body of the text write: SUBSCRIBE cyfhealth. If you have problems with the subscription process, you may also send an email to pears014@tc.umn.edu. requesting to be subscribed.

Psychological First Aid and Compassion Fatigue Workshop April 7, 2008

Minnesota Emergency Readiness Education and Training is collaborating with the Minnesota Department of Health and Drs. Jim Shultz and Andrea Allen from the University of Miami, Florida, to hold a one-day workshop in the Twin Cities metro area on psychological first aid and compassion fatigue. This free workshop is scheduled for April 7 at the Earle Brown Heritage Center in Brooklyn Center, Minnesota. CEUs available. For further information call 612-626-3033 or visit www.meret.umn.edu.

The Return to Work Post-Disaster: What Can Employers do to Support Employees?

Becky Seel

Once safety has been restored after a traumatic event, workers must return to their worksites. They may return with compromised health, increased stress, and financial burdens that could affect how quickly and efficiently they re-establish their work routines. Family and personal issues usually carry over to the work environment, even among people who are not exposed to human-made or natural disasters. After a disaster, though, the stresses associated with caregiving and wage earning may be expanded and conflicting. Nonetheless, maintaining routines is a way to ease stress and thus returning to work is one way to regain stability.[1] The resumption of routines in a safe environment is not enough, though, following a disaster: access to mental health counseling and support can facilitate individual recovery and expedite a return to worksite productivity.

How Do Employees Recover After a Disaster?

Mental health support programs at the worksite itself may not meet the needs of all employees, but all employees should have an opportunity to seek counseling and recovery services through their worksites. To meet employee needs after a disaster, worksites should also have strategies in place to assure that they provide a safe and productive site to work and experience collegial social support. Worksite resources may be especially important for individuals without families or external support networks and for employees who are primary caregivers. Caregivers may focus on family members to the point of neglecting their own psychological needs.[2] Employer-based programs and resources must address the normal and temporary post-traumatic reactions as well as the symptoms of more sustained psychological damage resulting from a trauma.

Disaster workers themselves represent a special group who require employer attention to mental health. Carrie Nolan, Senior Communications Manager at the Twin Cities Chapter of the American Red Cross, acknowledged their special challenge to maintain employee well-being. Not only does the American Red Cross extensively train staff to respond to emergencies and craft communication plans, but they are also trained to respond to the mental health needs of themselves and their co-workers. During disasters, there is a stress management team who is always available for counseling. During and after disasters, the employees take longer breaks to recoup, which are covered by volunteers who outnumber staff 10 to 1. The American Red Cross also arranges fun or recreational activities to reduce the stress level of the organization overall. This formal attention to stress is complemented by a culture that values mental health: Nolan noted that co-workers are constantly checking in with each other to make sure that all needs are met.

Some additional programs that could be offered by employers include:

Employee Assistance Programs that offer mental health screenings and referrals to counseling. While they are often provided by a third party, such programs may not be suitable for all employees, especially if they are provided at the worksite. Employees may be reluctant to share personal or mental health information with counselors they consider to be affiliated with their worksite because of stigma, fear of retaliation, or worries about confidentiality. Evidence that employer-supported counseling may be underutilized was reflected in a study of 1,542 employees of the largest employer in New Orleans following Hurricane Katrina. The researchers found that 19% of the employees had symptoms of post-traumatic stress disorder, but only 29% of those afflicted had spoken with a health care professional even though health insurance and a widely promoted employee assistance program (with free counseling) were universally accessible.[3]

Emergency/Disaster Paid Leave, like the policy at the University of Virginia, which provides up to 80 hours of paid leave for employees to provide assistance during a disaster or recover from the effects of a disaster.[4]

Incentives for volunteers to supplement diminished staff. For example, the State of Illinois formalized leave policies, through a state statute, for blood or marrow donation and volunteer services in a disaster.[5] Volunteering reduces the burden on social service and disaster relief agencies, giving their employees needed rest.

There is no perfect formula to promote employee well-being after a disaster. Because individual needs vary, employers should consider providing access to a range of policies and programs that include counseling, referrals for social and health-related services, flexible schedules, leave policies, and promotion of stress-reducing activities (e.g., meditation, yoga, social events). Appropriate services will consider both normal post-traumatic reactions and possible long-term needs for counseling. The following guidelines may be of help to supervisors of individuals who have special recovery needs following a disaster:[6]

1. Encourage adequate food, rest and recreation.
2. Provide for time at home to care for family needs, if necessary. Worries about family well-being can consume workers who have experienced a disaster.
3. Have an open-door policy that facilitates seeking care.
4. Create opportunities for breaks where co-workers can talk openly about their experiences. Sharing with others can speed personal recovery.
5. Re-establish routines, when possible. Workplace routines facilitate recovery by providing an opportunity to be active and to restore social contact.
6. Offer professional counselors to help co-workers address their fears and anxieties.

7. Once the need to listen for emergency instructions has passed, limit television, radio and other external stressors.
8. Take care of yourself. Leaders tend to experience added stress after a disaster.

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For more information:

Partnership for Workplace Mental Health, a program of the American Psychiatric Foundation: www.workplacementalhealth.org/

Ready.gov for Businesses, through the U.S. Department of Homeland Security: www.ready.gov/business/

Substance Abuse and Mental Health Services Administration. Disaster relief information: Managing Anxiety in times of Crisis http://mentalhealth.samhsa.gov/cmhs/managinganxiety/tips.asp.

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The University of Minnesota Medical Reserve Corps: Volunteers Who Respond to Disasters

Kathy Berlin

The Medical Reserve Corps (MRC) is part of a national effort to coordinate volunteers during times of emergencies. Volunteers range from licensed health professionals, retired health professionals, and people who are simply interested in volunteering. This effort, sponsored by the Office of the Surgeon General, began in 2002 to allow local communities to respond more rapidly to disasters and to encourage more local autonomy to meet the specific needs of communities. MRCs are organized at state, county, and city levels. They can even be organized within institutions, as is the case with the University of Minnesota's Medical Reserve Corps (UM-MRC).

The UM-MRC, created in 2004, includes about 900 students, staff and faculty volunteers from the University's Academic Health Center and Boynton Health Service. The UM-MRC may be called upon during large-scale emergencies to provide the following types of assistance: supplies dispensing or vaccinations; triage; direct medical care; disease surveillance and case investigation; emergency hotline support; and mental health crisis interventions. The UM-MRC has been deployed three times: to answer a hotline during an influenza vaccine shortage, to aid victims of Hurricanes Katrina and Rita, and, most recently, the UM-MRC sent 22 members to aid in the medical and behavioral health efforts immediately following the I35-W bridge collapse in August 2007. Among the teams organized by the UM-MRC is a Mental Health Crisis Response Team. During the aftermath of the I35-W bridge collapse, this team provided assistance in emergency rooms and at an ad hoc Family Assistance Center. Team members conducted 1:1 interventions with family members and facilitated group sessions with response and rescue personnel. For Hurricane Katrina and for the I35-W bridge collapse, UM-MRC (and other MRC) volunteers were likely among the first to provide needed mental health crisis care.

More information about the UM-MRC is at: http://www.ahc.umn.edu/about/admin/oer/mrc.html. For those interested in being part of a local MRC unit, check the national website to see if there is an MRC in your county, city, or state: http://www.medicalreservecorps.gov/FindMRC.asp.

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Palliative Care for Children NURS 5800, May 2008. This 4-day interdisciplinary seminar examines the physical, psychosocial, emotional and spiritual needs of children facing life-limiting conditions. For individuals with any healthcare background who want graduate or CEU credits. Contact Susan O'Conner-Von DNSc, RNC at ocon0025@umn.edu

Virtual Disaster Exposure and Children's Mental Health

Terra Carey

When disasters or major traumatic events occur, many people turn to televised news for up-to-date information. For adults, this information can be insightful, informational, and helpful in determining action plans and assessing situations. However, recent studies have suggested that for children, this "virtual" exposure could potentially affect mental health.

The media, especially television viewing, plays a prominent role in the lives of most children. In 2004, the Kaiser Family Foundation surveyed more than 2,000 students in 3rd–12th grades and reported that they watched, on average, more than three hours of television on the day prior to taking the survey. They also reported that 8–10 year-olds watched nearly 45 minutes more television on the preceding day than 15-18 year-olds.[1]

The high level of exposure to television (and other media) could affect the mental health of children because of the potential that they will be heavily exposed to information about natural disasters, war, and crime. "Real-time" media coverage involves live, and sometimes uncensored, coverage from disasters and traumatic events. Often the same sensational clips are played again and again. Repetitive and sensational images can increase the perception of individual risk. A survey conducted immediately following the September 11, 2001 terrorist attacks found that on the day of the attacks, children watched an average of three hours of televised coverage of the attacks, with 36% of the children watching two to four hours of attack coverage and 23% of children watching five or more hours of coverage.[2] A survey of Okalahoma City students following the 1995 Oklahoma City bombing found that, in the seven weeks after the bombing, 67% of the students spent "all" or "most" of their television viewing time watching bombing-related event coverage.[3]

Research has found that the increase in televised news coverage of these events may lead to mental distress, anxiety, generalized stress, and many of the signs of Posttraumatic Stress Symptoms (PTSS) and Post-Traumatic Stress Disorder (PTSD).[4] However, the establishment of direct causation requires additional research. For example, a study conducted of the 1988 earthquake in Armenia that killed tens-of-thousands of people concluded that the children who re-experienced distress symptoms related to their past earthquake-related trauma were most likely the result of daily television viewing of the only channel available.[5] A study conducted of Kuwaiti children who had been affected by the Iraqi invasion of Kuwait in 1990 found that children who were exposed to media depictions of the tragedies of war were more likely to suffer from PTSS.[6] Similarly, a study of the mental health of children who viewed graphic televised media following the Oklahoma City bombings found that "…for children without physical or emotional exposure, television exposure was significantly related to posttraumatic symptomatolgy."[3]

There are many things that parents, teachers, and health-care providers can do to prevent the likelihood that a child will develop mental distress following a traumatic event. The American Academy of Child & Adolescent Psychiatry (AACAP) has issued suggestions for parents when dealing with traumatic events in the news, especially events related to war, violence, and terrorism. Among the AACAP suggestions are that parents limit the amount of "violent or upsetting images on TV," especially for young children who are often more disturbed by these images than their older counterparts.[7] The AACAP also encourages parents to watch the news with their children to enable them to provide immediate reassurance or mental-processing support for their children.[8]

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Children and the Media: What Happens When Disasters Unfold in Our Homes

David Walsh, Ph.D

We know that major disasters can destroy homes and businesses, end lives, and ruin livelihoods. We often understand the impact of disasters through watching them unfold on television and other media. Since the advent of 24-hour cable news and internet news sources, we have the potential to be exposed to images and reports of disasters anywhere and anytime, even when they occur on the other side of the world. Most people were spared physical exposure to the September 11th attacks, Hurricane Katrina, and the tsunami that wreaked havoc in the Indian Ocean several years ago. But many of us were glued to our television and computer screens as we watched the horrific scenes from these events played over and over again. While viewers do not suffer loss of life or injury, all those hours exposed to media about major catastrophes can be traumatic. In fact, after September 11, 2001, many people whose only exposure to the terrorist attacks on New York City and Washington DC was through media footage reported symptoms similar to those of post-traumatic stress disorder.

A growing body of research has demonstrated the effects of media: images of violence and destruction can inspire fear, darken one's worldview, and make one prone to aggression. Especially with repeated exposure, it seems that moving images of traumatic events can have a profound affect on a person's well-being.

The Impact of Televised Reports of Disaster on Children

Children may be exposed to disasters through many forms of media coverage, but likely have the most exposure through television. Traumatic images in the media, like news coverage of major disasters, have the biggest impact on children, especially very young children. This is partly a product of their ongoing cognitive, emotional, and neurological development. Because children are constantly wiring and re-wiring important parts of their brains, the things they experience and see can literally shape the way they think and feel about the world. Neurological research has shown that images on screens affect the way neural pathways are formed, just as real-world experiences shape and hone the connections among the brain's neurons or nerve cells.

Children at different stages of development have different reactions to the televised description of disasters. Children under five do not fully comprehend the boundaries of reality. When they see, for instance, multiple replays of the Interstate 35-W bridge in Minneapolis falling into the Mississippi river, they do not comprehend that this image is of the same past event. Instead, they see bridge after bridge after bridge collapsing. Children who are a bit older understand that the repeated images on TV are not really happening over and over, but rather reflect a single past event. Nonetheless, they process the information in relation to their own well-being. For them, the disaster on television feels like a possibility in the future for them and their loved ones. As children age, they develop a more mature—and removed—response to news coverage, but it can still produce profound anxiety and fear, even in older children and adults who view ongoing disaster coverage. Fear and sadness are natural and normal reactions to catastrophes and, within limits, reflect healthy empathy with victims.

When disaster strikes, parents and other people who spend time with children should expect intense emotional reactions ranging from sadness to fear to relief.[1] Depression can also be a reaction to tragedy and its warning signs include ongoing sleep problems, feelings of hopelessness and guilt, and extreme sadness. Children may also respond with anger.[2] The ongoing tension can make children grumpy or edgy, especially if they perceive that things are out of control. Heightened anxiety can lead to difficulty sleeping, paying attention, and remembering.

Helping Children Cope With Media Exposure to Disasters

We can reduce the impact of media exposure to disasters on children if we follow a few simple guidelines:

- Take time to think about, and cope with, your own feelings.
- Let children know it is okay to ask questions. Answer their questions directly, but do not give them more information than they need or more than you think they can handle.
- Monitor what your kids see and hear about the tragedy through the media to make sure you are comfortable with the messages they are receiving based on their age, maturity level, coping skills, etc.

The best overall strategy when helping children who are exposed to media reports of disaster to cope with those images is to acknowledge that they may be emotionally affected and find ways to reassure them. Take your cues from children: don't assume they are more afraid than they may be. Conversely, don't assume that they are unaware of, or unaffected by, what has happened, even if you are sure they are not old enough to understand the circumstances of the event. Be aware that children may experience a range of responses that could vary in type and intensity over time. It is always good to keep "checking in" with children, delicately, so they have the chance to express their feelings and ask questions without feeling like they are being forced to discuss or consider the tragic event more than is comfortable for them.

Children should be protected from too many media images and stories of tragic events. Although it can be tempting to leave around-the-clock news playing in our homes to catch every new development when a disaster occurs, we should think twice if we have young children. Those updates are almost always accompanied by footage of the initial event, which is just the sort of thing that can traumatize toddlers.

Sometimes, as in the case of last summer's Interstate 35-W bridge collapse, we cannot completely protect children from exposure to news about disasters. Especially in the first few days

afterwards, the latest news is on everyone's lips. Rumors fly and the news media saturate our minds with miniscule details. When discussion of disaster is all around us, we should make sure to talk about it with young people because they can be indirectly affected. Children cannot always comprehend emotion-laden images and they do not always understand whether disasters are happening to their families, in their backyards, or thousands of miles away.

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Dr. David Walsh is the founder and President of The National Institute on Media and the Family, which is an independent, non-partisan, non-sectarian, nonprofit organization. The Institute's mission is to maximize the benefits and minimize the harm of media on the health and development of children and families. For more information, go to http://www.mediafamily.org.

New Director of MCH Outreach

Please welcome Julia Johnsen, MPH, as the new Director of Outreach for the Center for Leadership Education in Maternal and Child Health. She is responsible for continuing education and outreach, including the Healthy Generations newsletter, the program website, conferences and institutes, technical assistance to MCH professionals in the community, and identifying and coordinating community field experiences for MCH graduate students. Julia has experience in conducting community-based needs assessments, program development and evaluation, curriculum development and evaluation, conducting focus groups and interviews, building organizational capacity using technology and using software to analyze qualitative data. Julia is available for consultation and technical assistance on these and other topics.

Julia, a Duluth, Minnesota native, comes to us from the Department of Pediatrics in the University of Minnesota Medical School. Julia has also worked with the Minnesota Department of Health, Northwest Youth and Family Services, The Sexual Violence Center and the YWCA of Minneapolis on a variety of projects. She is a 2007 graduate of the Maternal and Child Health program at the University of Minnesota.

WEB RESOURCES

American Psychological Association
– Disasters: **www.apa.org/topics/topicdisasters.html**
– Reactions & Guidelines for Children following Trauma/Disaster: **www.apa.org/practice/ptguidelines.html**
APA Help Center – Disasters & Terrorism: **http://apahelpcenter.org/articles/topic.php?id=4**
American Red Cross Twin Cities Chapter - Coping with Disaster
– Tips for Children & Adults: **www.redcrosstc.org/newsDetail.cfm?page=PSVAPGEJ**
Center for Mental Health Services (CMHS), Substance Abuse and Mental Health Services Administration (SAMHSA): **www.mentalhealth.samhsa.gov**
Centers for Disease Control and Prevention: **www.bt.cdc.gov/mentalhealth/**
Disaster Mental health Institute, University of South Dakota: **www.usd.edu/dmhi/**
ECHO Minnesota – Emergency & Community Health Outreach: **www.echominnesota.org/**
Federal Emergency Management Agency (FEMA): **www.fema.gov**
Mental Health America, formerly National Mental Health Association: **www.nmha.org/go/information/get-info/coping-with-disaster**
Minnesota Association for Children's Mental Health: **www.macmh.org**
Minnesota Department of Health Mental Health Emergency Preparedness: **www.health.state.mn.us/mentalhealth/mhep.html**
National Child Traumatic Stress Network: **www.nctsnet.org**
National Institute Mental Health: **www.nimh.nih.gov/health/topics/coping-with-traumatic-events/index.shtml**
Research Education in Disaster Mental Health: **www.redmh.org**

Anticipating the Unthinkable: Emergency Preparedness Online Training

Becky Seel

Bioterrorism, chemical and radiation incidents, natural disasters, and epidemics are all emergencies for which the public, and the public health workforce, must be prepared. Timely and effective responses to large-scale disasters require ongoing education, experience and evaluation at multiple levels and the funding to support them. This awareness was heightened in response to the events of September 11, 2001. Since 2001, the U.S. government has distributed $7 billion for disaster planning. Public health agencies received $900 million in 2007 to develop their emergency preparedness programs.[1] However, levels of federal funding are decreasing yearly, causing concern among local public health departments about whether they can maintain the programs and capacity developed since 2001.[2]

How Do Local Public Health Agencies Improve Their Disaster Response Programs?

With disaster response programs established, the new emphasis is on improvement and coordination between organizations. One of the nine National Preparedness Goals developed by the Centers for Disease Control and Prevention (CDC) is focused on enhancing the vertical and horizontal communication between disaster response agencies.[3] The planning document stresses, "…only when programs are managed and implemented through an interdisciplinary and multijurisdictional approach can the nation truly begin to operate in the coordinated fashion that an incident of national significance would demand."[3] Locally, coordination involves state and local public health agencies, healthcare providers, tribes, first-responders, emergency managers, military officials and even journalists. Practice and training help to develop integrated disaster and communications plans.

In the past, public health agencies used a number of training exercises to develop local plans, including seminars, tabletop games, computer simulations, and full-scale exercises, but there has been little evaluation of their effectiveness. The National Center for Disaster Preparedness and the Center for Health Policy at Columbia University initiated a call for specific public health standards for exercises and drills in 2006.[4] In response, the Homeland Security Exercise and Evaluation Program (HSEEP) was created as a comprehensive system to aid organizations in planning disaster response programs.[5] With HSEEP, locally tailored exercises can follow national guidelines for disaster planning.

Public health professionals can learn about effective training procedures from the experiences of others. For example, local health agencies in central Kansas recently participated in a simulation to gauge staff planning and response during an infectious disease outbreak. Participants evaluated themselves before and after the simulation in four areas: surge capacity, coordination between counties, risk communication, and agency protocols and procedures. The simulation significantly improved the participants' ability to respond to a disease outbreak in a multidisciplinary setting and to identify surge capacity in a regional exercise.[6]

University Programs That Provide Training in Emergency Preparedness

At the University of Minnesota, the Center for Public Health Preparedness (CPHP) is housed in the Centers for Public Health Education and Outreach (CPHEO). It serves as a public health training resource nationally, with its online modules and an academic certificate and executive master of public health degree option in preparedness, response and recovery (http://www.sph.umn.edu/education/php/home.html), and regionally, through partnerships with health departments and tribal governments in the Midwest. With funding from the CDC, CPHP provides a Public Health Emergency Training series online as well as online modules designed to train volunteers who will support a public health or healthcare response. It also has a free online gaming simulation training entitled "Disaster in Franklin County" for public health staff. The simulation gives learners the perspectives of various professionals as they follow the public health response and recovery in a fictitious community for 30 days during and after a severe storm and flooding. The simulation responses include flood water clean-up, food-service inspections, shelter operations, evacuation of elderly people and the establishment of an incident command system. The simulation also allows professionals to build an exercise related to the gaming simulation that allows staff discussion about specific disaster planning relevant to their circumstances.

There are other options for online emergency preparedness tools for public health and health care workers, including: (1) the Disaster Mental Health Institute at the University of South Dakota, which offers a certificate in disaster response, a doctorate of clinical/disaster psychology, and continuing education classes;[7] (2) Minnesota Emergency Readiness Education and Training (MERET; www.meret.umn.edu), also administered through CPHEO as a partnership between the Schools of Nursing and Public Health, University of Minnesota, offers training on various topics in emergency preparedness, including a focus area on children and pregnant women;[8] and (3) the National Association of City and County Health Officials provides online tools for disaster planning on subjects such as response partners and training assessments.[9]

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9. National Association of City and County Health Officials. NACCHO's toolbox. Available from: http://www.naccho.org/toolbox/index.cfm.

For more information:

Centers for Disease Control and Prevention efforts on emergency preparedness and response: www.bt.cdc.gov/index.asp

Online trainings in emergency preparedness and other public health topics: www.cpheo.sph.umn.edu

The Disaster in Franklin County gaming simulation is free: on http://cpheo.sph.umn.edu/online.

For more information about this and other CPHEO programs, contact Amy Scheller at 612-624-3962.

Becky Seel is an MPH student in the Maternal and Child Health Program at the University of Minnesota.

Pediatric Emergency Preparedness: Issues and Roles

This one-hour, online module is based on a panel presentation given at the October 2006 Minnesota Chapter of the National Association of Nurse Practitioners (NAPNAP) meeting in Minneapolis, Minnesota. The goal of this module is to raise health professionals' awareness of emergency readiness for children. To access, visit: http://cpheo1.sph.edu/meret/pediatric.asp. CEUS available.

Disaster Mental Health continued from page 3

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FREE Event

Unnatural Causes: Is Inequality Making Us Sick?

Thursday, February 28, 2008; 5:15 to 7:15 p.m.
Parkway Theater
4814 Chicago Ave. So., Minneapolis

Seating is limited: call or email Becky Seel to RSVP: seelx004@umn.edu or 612-626-2273

UNNATURAL CAUSES sheds light on mounting evidence that demonstrates how work, wealth, neighborhood conditions and lack of access to power and resources can actually get under the skin and disrupt human biology. Compelling personal stories demonstrate how social conditions are as vital to our health as diet, smoking, and exercise. As Harvard epidemiologist David Williams points out, investing in our schools, improving housing, integrating neighborhoods, giving people more control over their work, these are as much health strategies as smoking diet and exercise. www.unnaturalcauses.org .

Sponsored by the Center for Leadership in Maternal and Child Public Health, School of Public Health, University of Minnesota.

Interested in making a difference?

Consider a Master's in Public Health (MPH) Degree in Maternal and Child Health (MCH)

Erin Galegher is a second-year Masters of Public Health (MPH) student in the Maternal and Child Health Program. Erin selected the University of Minnesota's School of Public Health because she "knew that the University of Minnesota had a good MPH program and that the school encouraged students to explore global public health issues."

Erin applied her public health and global health training to her field experience at FACT (Forum of Activists Against Torture) Rwanda in Kigali, Rwanda. FACT Rwanda is a non-governmental organization established in 1999 to help the country rehabilitate its citizens after the genocide. Its specific aim is to address the consequences of torture and organized violence in Rwanda. Erin financed her field experience, in part, through MCH scholarships, including the Cecelia Goetz Scholarship. She was able to establish contacts in Rwanda through the Twin Cities-based Center for Victims of Torture.

Erin's field experience reaffirmed her belief that "public health is a global issue. We are all interconnected and United States based organizations affect—and are affected by—organizations throughout the world." Erin also discovered that the definition of Maternal and Child Public Health is broad: any issue that affects families is an MCH issue, whether it be health or social disorganization.

Erin is thankful for the opportunity she has had to apply her public health skills in Rwanda, a part of the world that has known tremendous violence and has an urgent need for thoughtful public health practitioners in MCH. She is also thankful to the School of Public Health for helping to facilitate one of the most influential and thought-provoking components of her MPH training.

For more information about FACT Rwanda, go to: www.fact.org.rw

For more information about the Center for Victims of Torture, go to: www.cvt.org/main.php.

What is the Maternal and Child Health Program? An MPH training program that offers a state-of-the art curriculum to address the public health needs of vulnerable populations in domestic and international settings. It is part of the Division of Epidemiology and Community Health, School of Public Health at the University of Minnesota.

Who are the faculty? The MCH faculty is multidisciplinary with expertise in medicine, nursing, psychology, sociology, and nutrition. Their research and training opportunities focus on children with chronic health conditions; reproductive health and family planning; pregnancy outcomes; social inequities in health; women's health; infectious disease; substance use; community health promotion; and community-centered interventions.

Who should apply? People who care about vulnerable populations and want careers in public health advocacy, program planning and development, evaluation, surveillance, assessment, teaching, or research. The program offers three options: a standard curriculum in MCH, a curriculum with an epidemiology emphasis, and an on-line curriculum.

For further information about the MCH Program call 612-626-8802 or 1-800-774-8636; e-mail gradstudies@epi.umn.edu; or visit www.sph.umn.edu/education/mch/home.html.

Online MPH at University of Minnesota for Professionals

The program: The Maternal and Child Health (MCH) Program (School of Public Health, University of Minnesota) has an online MPH program for professionals who want to attain leadership roles in MCH or related fields. The program focuses on social justice and ensuring the health of vulnerable populations. Students will gain expertise in developing evidence-based advocacy, rigorous public health assessment, accessible and appropriate health education, and effective and innovative programs and policies that promote the health and well-being of women, children, adolescents, and families.

The coursework: The online coursework is geared toward MCH-specific content and public health skills. Students also participate in 1-2 short (1-week) on-campus courses that focus on cutting edge issues held every spring on the Twin Cities campus.

Tuition: Minnesota in-state tuition, regardless of state or country of residence.

Eligibility: Individuals with an advanced degree (e.g., MD, MSW, MSN, MS, PhD) OR individuals without an advanced degree who have 3 or more years of work experience in MCH or a related field.

For more information: Please contact Kathryn Schwartz at gradstudies@epi.umn.edu or 612/626-8802.

CONFERENCES

Save these dates for upcoming regional conferences ...

Upcoming Events

February 28, 2008: Film Screening: Unnatural Causes: Is inequality making us sick? 5:15-7:15 p.m. (free event) Parkway Theater, Minneapolis, MN. www.epi.umn.edu/mch.

March 1-5, 2008: Association of Maternal and Child Health Programs. Arlington, VA. www.amchp.org

March 10-12, 2008: National STD Prevention Conference. Chicago, IL, www.cdc.gov/stdconference

March 15, 2008: International Women's Day Celebration. Coffman Union, University of Minnesota, Minneapolis, www.mnadvocates.org

March 26-28, 2008: Dakota Conference on Rural and Public Health Addressing Health Care Challenges. Fargo, ND. www.usd/ssec/homepage.cfm.

April 1-2, 2008. Iowa Public Health Conference. Ames, IA. www.idph.state.ia.us/default.asp.

April 7-9 & April 11, 2008. National Public Health Week Film Festival, School of Public Health, University of Minnesota, Minneapolis, www.sph.umn.edu/about/news/events/save.html

April 27-29, 2008: Minnesota Association for Children's Mental Health Conference. Duluth, MN. www.macmh.org/programs_services/education/conference/exhibitorpage.php

May 1-2, 2008: Minnesota Organization on Adolescent Pregnancy, Prevention, and Parenting 17th annual Conference. Brooklyn Center, MN. www.moappp.org/training/conference.html.

May 27 through June 13, 2008: School of Public Health Summer Institute, University of Minnesota, Minneapolis, www.cpheo.sph.umn.edu/institute

June 12, 2008: Maternal and Child Health 2008 Summer Institute. University of Minnesota St. Paul Campus. www.epi.umn.edu/mch.

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