



Fact Sheet

IWPR #D492

August 2010

Women, Disasters, and Hurricane Katrina

Major disasters during the last decade have pushed planners and researchers to examine more closely the disparities among those hurt when crises hit.¹ Research suggests that women often suffer disproportionately in comparison to most men when disaster strikes, while the elderly, and people in poverty, are more vulnerable than those with more mobility and those with greater access to resources.² According to reports addressing disasters occurring outside of the United States, 1.5 times as many women as men died during the 1995 Kobe earthquake,³ and three times as many women as men died from the 2004 Asian tsunami; age and income level were contributing factors.⁴



Photo: IWPR. June 2010. New Orleans.

Of those individuals reported to have died in 2005 because of Hurricane Katrina, over a hundred from the state of Louisiana remain missing. At the same time, for over a hundred of the 1,464 fatalities confirmed as having taken place during or in the immediate aftermath (September and October) of the storm, the gender, race, age, and location of death are unknown or unavailable. Exact numbers vary across reports, but all analyses confirm that a majority of deaths in Louisiana during and immediately after Hurricane Katrina were disproportionately among the elderly as a result of the flooding of New Orleans. A recent analysis, by an international team of researchers, shows that approximately two-thirds of 853 identifiable deceased probably drowned after the levees ruptured, while another one third died either in shelters and hospitals in the flooded areas, or from situations other than the flood itself. Of those studied, the percentage of men (50.6) and women (49.4) killed was almost equal; a majority were African American (55 percent); and most (60 percent) were over the age 65 while half were 75 years or older.⁵

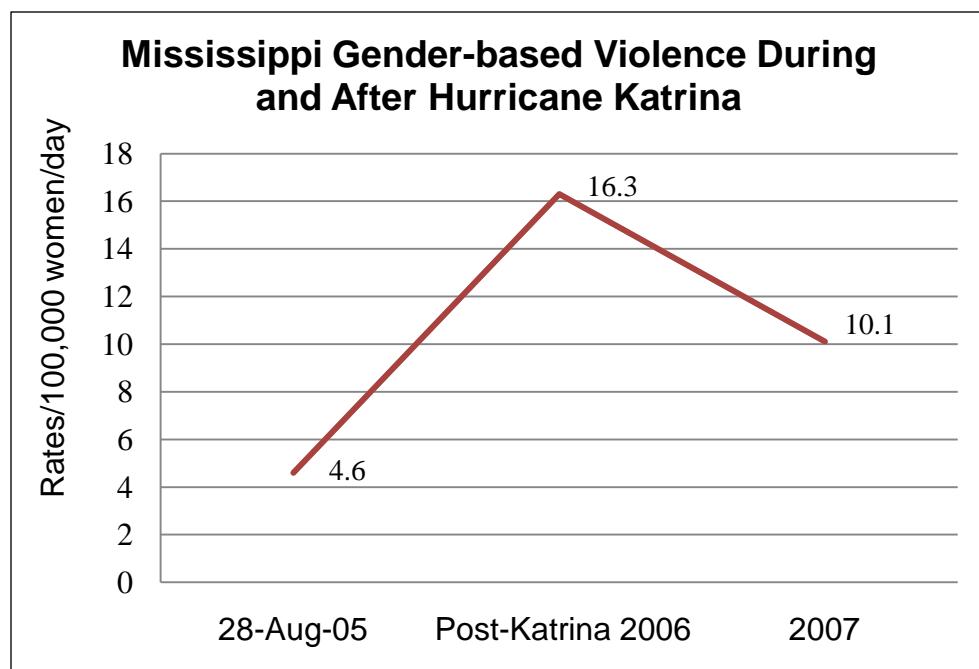
In the months and years after the city was evacuated then began to re-build, deaths continued to occur in New Orleans at rates disproportionate to a city of its size.⁶ However, disaster-related fatalities and health conditions either in New Orleans or throughout the Gulf region are not reported consistently by gender, race or ethnic group, age, or income level, despite concerns about unequal impacts of the 2005 crises.⁷ To learn more about what happened to women, particularly those who are low-income, the Institute for Women's Policy Research has conducted research for the past five years within Louisiana, Mississippi, and Texas.

Women generally are at greater risk during disasters and their aftermaths because of multiple factors. Most importantly, women are more likely than men to live in poverty. At the time that Hurricane Katrina hit, 25.9 percent of women in New Orleans were living below the poverty line compared to 20 percent of men.⁸ Poverty matters, because it limits resources that in turn allow more opportunities for escape, or survival when escape is impossible. Women interviewed by IWPR for its current study were residents of New Orleans public housing at the time of Katrina, and few had cars, but under normal circumstances were able to get around the city by walking or by bus; when the city flooded after the levees broke, the

women who could escape their homes were then stranded around the city, unless they were able to find someone with an undamaged vehicle who would help.⁹

Other factors worsen the situation for women. Women in most regions share a greater responsibility for child care than men and more often than men have the home as their workplace, with residences often of less stable construction than commercial or public buildings. Women who are pregnant or recovering from childbirth have limited mobility and face additional difficulties during disasters. Women also make up a greater proportion of the elderly, typically one of the groups with the highest mortality rates during disasters—especially when, as in the case of New Orleans, hospitals are not evacuated.¹⁰

Women also face a high risk of gender-based violence (physical, mental and emotional violence perpetrated due to the gender of the victim) at the time of the disaster and during the immediate response and years that follow. As the following figure shows, the rate of gender-based violence (including sexual assault and domestic violence) in Mississippi rose from 4.6 per 100,000 per day when Hurricane Katrina hit the state, to 16.3 per 100,000 per day a year later while many women remained displaced from their homes and were living in temporary shelters and trailers. The rate declined again in subsequent years.¹¹ As a result of all of these different situations and conditions, during or soon after most disasters, more women are endangered than men.¹²



Source: IWPR chart using data from Anastasio, Michael, Nadine Shehab, and Lynn Lawry. 2009. "Increased Gender-based Violence Among Women Internally Displaced in Mississippi 2 Years Post-Hurricane Katrina." *Disaster Medicine and Public Health Preparedness*. 3: 18-26.

What Can Be Done

In the future, it will be vital for communities to plan how they will alleviate the added difficulties faced by women during a disaster. Simple measures can be taken to prevent additional hardships on women, such as having emergency contraceptives, antibiotics, and retroviral drugs available and making arrangements to help evacuate those who are elderly or disabled, particularly those without access to private vehicles. Checklists and basic principles of a gendered response to a disaster now are available through several organizations including the Gender and Disaster Network, at <http://www.gdnonline.org/>.

Another gap in disaster response, as well as in disaster preparation and policy, is that women within local contexts remain relatively unininvolved in leadership roles. This problem was highlighted during the response to the 2010 earthquake in Haiti. Many local women's groups and leaders were active in that nation prior to the crisis: their established level of trust and experience should have been, but was not, used to facilitate rebuilding activities from the outset, resulting in unnecessary added delays getting help to the population affected.¹³ As IWPR is doing within its current research, the views of local women who have been affected should be sought and, going forward, local women should be part of policy and planning processes.¹⁴

Finally, more needs to be known about how men and women, and women of different races, ethnicities, ages, disability statuses, and economic levels are affected by crises. Future data collection in the wake of a disaster must include information disaggregated by gender as well as by age, race and ethnic group, and disability status if known. This information would allow relief workers to focus their efforts on vulnerable populations, and provide invaluable resources for disaster planning.¹⁵ The data will not prevent the next flooding of New Orleans¹⁶ or a hurricane from hitting the Gulf Coast, but might mitigate the effects.

This fact sheet was prepared by Jane M. Henrici, Ph.D., Allison Suppan Helmuth, and Jackie Braun. Financial support was provided by the Bill & Melinda Gates Foundation through the Social Science Research Council (SSRC) Katrina Task Force.

IWPR began research along the Gulf Coast almost immediately after Hurricane Katrina to learn how women in particular were affected, and how post-disaster conditions for women and their families might be improved: please see IWPR publications #D464, #D465, and #D481. A new IWPR study based on interviews conducted in Baton Rouge, Houston, and New Orleans with women who were residents of New Orleans public housing before Hurricane Katrina will be released in 2011.

For more information on IWPR reports or membership, please call (202) 785-5100, email iwpr@iwpr.org, or visit www.iwpr.org.

The Institute for Women's Policy Research (IWPR) conducts rigorous research and disseminates its findings to address the needs of women and their families, promote public dialogue, and strengthen communities and societies. The Institute works with policymakers, scholars, and public interest groups to design, execute, and disseminate research that illuminates economic and social policy issues affecting women and their families, and to build a network of individuals and organizations that conduct and use women-oriented policy research. IWPR's work is supported by foundation grants, government grants and contracts, donations from individuals, and contributions from organizations and corporations. IWPR is a 501 (c) (3) tax-exempt organization that also works in affiliation with the women's studies and public policy programs at The George Washington University.

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- ² Neumayer, Eric and Thomas Plümper. 2007. "The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy, 1981-2002," *Annals of the American Association of Geographers*, 97 (3), pp. 551-566.
- ³ Ibid.
- ⁴ Oxfam. 2005. "The Tsunami's Impact on Women." <http://www.oxfam.org.uk/resources/policy/conflict_disasters/downloads/bn_tsunami_women.pdf> (July 8, 2010).
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- ⁸ Gault, Barbara, Heidi Hartmann, Avis Jones-DeWeever, Misha Werschkul, and Erica Williams. "The Women of New Orleans and the Gulf Coast: Multiple Disadvantages and Key Assets for Recovery Part I. Poverty, Race, Gender and Class." 2005. Institute for Women's Policy Research. Publication No. D464. Washington DC.
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- ¹⁰ Neumayer, Eric and Thomas Plümper. 2007. "The Gendered Nature of Natural Disasters: The Impact of Catastrophic Events on the Gender Gap in Life Expectancy, 1981-2002," *Annals of the American Association of Geographers*, 97 (3), pp. 551-566.
- ¹¹ Anastasio, Michael, Nadine Shehab, and Lynn Lawry. 2009. "Increased Gender-based Violence Among Women Internally Displaced in Mississippi 2 Years Post-Hurricane Katrina." *Disaster Medicine and Public Health Preparedness*. 3: 18-26; also see "Our Bodies are Still Trembling: Haitian Women's Fight Against Rape." 2010. Institute for Justice and Democracy in Haiti, *Bureau des Advocats Internationaux*, Lawyer's Earthquake Response Network, TransAfrica Forum, MADRE, University of Minnesota Law School Human Rights Litigation and Advocacy Clinic, University of Virginia School of Law International Human Rights Law Clinic and Human Rights Program.
- ¹² Ibid.
- ¹³ Gender Shadow Report of the Haiti Post-Disaster Needs Assessment, *Ensuring Haitian Women's Participation and Leadership in All Stages of National Relief and Reconstruction*, <http://org2.democracyinaction.org/o/5095/images/HaitiGenderShadowReport_preliminary_version.pdf> (August 23, 2010).
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