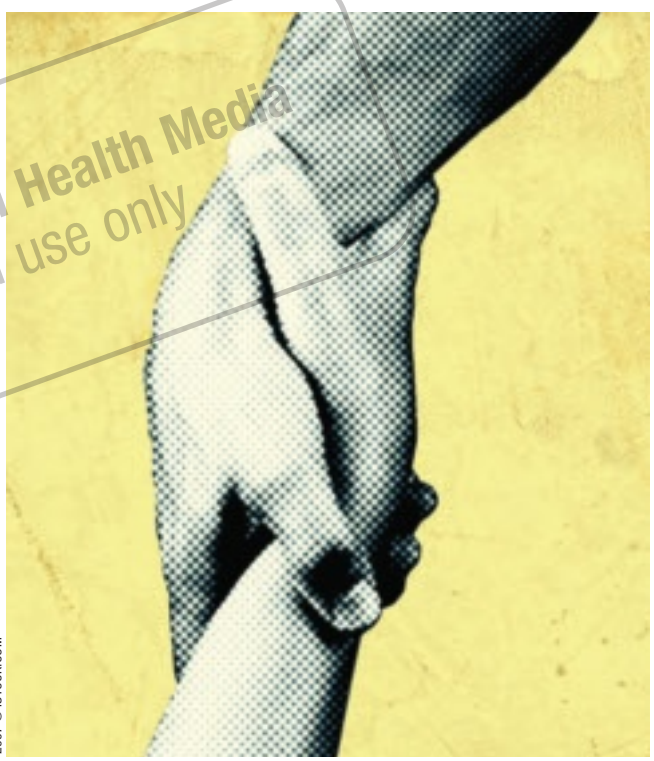
Current PSYCHIATRY

Disaster ethics: What are the ground rules?

3 cases can help you make appropriate decisions when priorities suddenly change

Bioethics of clinical practice change during disasters, as our staff learned when providing emergency care to Hurricane Katrina evacuees. During crises such as severe weather, terrorist acts, and epidemics, physicians can be torn between advocating for individual patients' needs or the public good.[1]

As the storm's 2-year anniversary approaches (***Box, page 70***),[2,3] we share our experiences to help you prepare for disasters in your community and to contribute to the limited data on ethics in disaster psychiatry. This article describes 3 cases to show how mental health clinicians balanced issues such as conflict, consequences, patient rights, physician virtues, and justice when making treatment decisions in the Houston Astrodome clinic.



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CASE 1

Benzodiazepines for anxiety?

Mr. R, age 23, presented to the Astrodome mental health clinic requesting "Xanax for my nerves." He said he had been taking 6 mg/d "for years and years, and it's the only thing that helps." Mr. R claimed he had been without his medicines at least 48 hours.

The assessing psychiatrist found no evidence of benzodiazepine withdrawal or other psychiatric emergency. The dilemma: How to provide appropriate acute treatment of a chronic problem, without continuity of care and follow-up.

As a hurricane survivor, Mr. R experienced a traumatic event that could have exacerbated an underlying anxiety disorder. But patients' use of and physicians'

Box

In the Astrodome clinic: 12-hour shifts, rapid assessments

Hurricane Katrina struck August 29, 2005, causing >1,000 deaths and displacing several hundred thousand Gulf Coast residents. Nearly 25,000 New Orleans evacuees were bused to the Houston Astrodome, where the medical clinic logged 11,000 patient visits in 15 days (including >1,000 to the mental health clinic).[2,3]

I joined a mental health team that met the first evacuees, who arrived disheveled, exhausted, and hungry at 5 AM. Many had chronic psychiatric disorders and had lost their medications in the flood. Mental health teams from Houston and elsewhere staffed the clinic around the clock to address the patients' issues, including schizophrenia, depression, and anxiety.

Limited resources and privacy

Patients streamed through the clinic 24 hours a day, the vinyl sheets between "exam rooms" providing a modicum of privacy. Resources were limited, and we performed assessments much more rapidly than my usual 1-hour initial evaluation. I worked 12-hour shifts for 10 days until I developed the fever (104 °F) and infectious diarrhea that spread among patients and clinic workers.

Some patients arrived requesting "little round white pills" that had quieted their hallucinations, but we had no way to retrieve records destroyed in New Orleans pharmacies. Sometimes we carried backpacks filled with medicines and made "rounds" to patients who were afraid to leave their cots for fear of losing their beds.

Missing neonate

In one case, our team helped a distressed couple find a newborn who had been evacuated from a Louisiana hospital ICU to an unknown location. After several hours, we located the baby in a Texas hospital. In appreciation, the baby's mother returned the next day to volunteer with us.

Managing patient care during a disaster was a powerful experience. I think about the evacuees often and hope I made a difference in their new beginnings.

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prescription of benzodiazepines can have adverse short- and long-term consequences. Mr. R's case highlights the conflict between establishing patient-physician trust vs enabling a patient's suspected misuse of prescription medication.

Table 1

Ethical principles that guide disaster psychiatry

Principle	Definition	Example
Respect for autonomy	Promotion of and respect for the patient with capacity to make informed, voluntary decisions about his or her healthcare	A competent patient must provide voluntary informed consent to be admitted to an inpatient psychiatric facility
Beneficence	The commitment to act in a manner that brings about benefit or a good outcome	During an emergency, a physician overrides a patient's confidentiality to inform his mother of his location
Nonmaleficence	An obligation to avoid doing harm	Physician refuses to prescribe potentially harmful medication to a patient with an addiction
Justice	"Fair" distribution of healthcare resources	Each patient receives care according to need or as resources are available

Source: Adapted from reference 11

Few guidelines exist to help clinicians manage trauma patients immediately after a disaster.[4,5] Until recently, debriefing was thought to help prevent posttraumatic stress disorder (PTSD), but multiple studies indicate that debriefing is not effective and may worsen psychological outcomes.[6,7]

Recommended postdisaster treatment now integrates 4 elements:

- providing for basic needs (food, shelter, clothing, and safety)
- psychological first aid
- needs assessment
- psychoeducation about normal responses to disasters.[8]

Data support stress-reducing programs—such as yoga-based trauma relief—that may effectively and economically ameliorate trauma-related psychiatric symptoms.[9]

To make its decisions, the Astrodome clinic team considered the potential problems of prescribing benzodiazepines to patients such as Mr. R:

- Large numbers of traumatized victims might visit the clinic to request benzodiazepines, addictive drugs that for many would be inappropriate and potentially harmful.
- Resources such as medications, information, and time were limited. The team could not contact each patient's health care provider or pharmacy to verify prescription records.
- Using benzodiazepines to manage anxiety in the acute aftermath of a traumatic event is not supported by the literature.[10]

The team then designed a plan based on published guidelines to do the least harm (nonmaleficence) and provide the greatest benefit (beneficence) with limited resources. They chose to assess each patient's case individually.

In general, patients were not given benzodiazepines for acute anxiety or acute stress disorder. Evacuees who presented to the clinic were educated about normal responses to trauma, received supportive care, and were referred to on-site social service agencies for help finding housing and lost family members.

Clinical Point

In general, patients were not given benzodiazepines for acute anxiety or acute stress disorder

CASE 2

Urgent care for chronic illness?

Ms. J, age 46, presented to the mental health clinic for evaluation and treatment of chronic depression and anxiety. When asked how she was coping with the storm, she replied, "I wasn't in the storm. I live in Houston, and I've been waiting 6 months to see doctors at the public hospital. I decided to come here and see everyone I needed to see."

Because of news coverage, Houston residents were well-informed about the hurricane and the Astrodome clinics. Ms. J was resourceful in seeking needed treatment.

The Astrodome clinics were intended to provide acute care to evacuees who lacked alternate resources. Ms. J had chronic mental health problems, but her symptoms could have been exacerbated by graphic

Disaster psychiatry

Clinical Point

During emergencies, HIPAA allows you to share information as needed to notify families of a patient's location, general condition, or death

Table 2

Emotional dynamics that motivate disaster response

Altruism
Courage
Empathy
Compassion
Confrontation with mortality
Loss of personal sense of invulnerability
Identification with those affected
Relief at survival
Reminders of past experiences
Wish to undo harm and "do good"
Guilt about being unaffected
Feelings of affiliation

Source: Reference 13

media reports of the storm's devastation.

A challenge in treating chronic health problems in an acute setting is the inability to provide follow-up and continuity of care. An "emergency" clinic is meant to serve as a bridge to later care providers.

Four principles guide ethical decision-making: respect for autonomy, beneficence, nonmaleficence, and justice (***Table 1, page 71***). Would it be an injustice to allocate scarce resources—number of personnel, physician time, space, and medication—to a patient with chronic rather than acute needs?

One could argue that a patient-physician relationship and duty to treat began when Ms. J presented herself as a patient in need and began a dialogue with a physician. The treating physician felt Ms. J's interest would be served best by continuing the evaluation and acutely managing her symptoms while trying to help her obtain treatment in a more stable setting.

The staff correctly anticipated that this case was unique; no other patients who were not evacuees are known to have requested treatment at the Astrodome clinic.

CASE 3

Compassion vs confidentiality

Mrs. C, age 67, came to the mental health clinic in tears because she had been separated from her son when she boarded a bus to evacuate from New Orleans. Her son has schizophrenia, and she asked if we had seen him at our clinic. In fact, he had visited our clinic shortly before she arrived.

As healthcare professionals, we value compassion but also are bound by tenets of the physician-patient relationship—in this case, maintaining confidentiality. Physicians are ethically and legally obligated to refrain from disclosing information obtained from a patient without the patient's permission.[11]

Mrs. C was clearly distressed, however, and if one considered her also to be a patient then providing the information she requested could benefit her well-being. She knew her son's diagnosis, so there would be no "new" disclosure of medical information if clinic staff answered her question. Furthermore, Health Insurance Portability and Accountability Act (HIPAA) regulations for emergency situations aid in making similar decisions. The law states:

"Health care providers can share patient information as necessary to provide treatment. Health care providers can share patient information as necessary to identify, locate, and notify family members, guardians, or anyone else responsible for the individual's care of the individual's location, general condition, or death."[12]

Bottom Line

Ethical practice during disasters calls for doing the least harm (nonmaleficence) and providing the greatest benefit (beneficence), often with limited resources. In emergencies, usual tenets of the physician-patient relationship, such as maintaining confidentiality, are sometimes overruled by the need to provide for patients' well-being.

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highest dose of oral olanzapine (15±2.5 mg/d). In controlled clinical trials of intramuscular olanzapine for injection, there were no statistically significant differences from placebo in occurrence of any treatment-emergent extrapyramidal symptoms, assessed by either rating scales incidence or spontaneously reported adverse events.

Other Adverse Events: Dose-relatedness of adverse events was assessed using data from this same clinical trial involving 3 fixed oral dosage ranges (5±2.5, 10±2.5, or 15±2.5 mg/d) compared with placebo. The following treatment-emergent events showed a statistically significant trend: asthenia, dry mouth, nausea, somnolence, tremor.

In an 8-week, randomized, double-blind study in patients with schizophrenia, schizophreniform disorder, or schizoaffective disorder comparing fixed doses of 10, 20, and 40 mg/d, statistically significant differences were seen between doses for the following: baseline to endpoint weight gain, 10 vs 40 mg/d; incidence of treatment-emergent prolactin elevations >24.2 ng/mL (female) or >18.77 ng/mL (male), 10 vs 40 mg/d and 20 vs 40 mg/d; fatigue, 10 vs 40 mg/d and 20 vs 40 mg/d; and dizziness, 20 vs 40 mg/d.

Vital Sign Changes—Oral olanzapine was associated with orthostatic hypotension and tachycardia in clinical trials. Intramuscular olanzapine for injection was associated with bradycardia, hypotension, and tachycardia in clinical trials (*see* PRECAUTIONS).

Weight Gain—In placebo-controlled 6-week schizophrenia studies, weight gain was reported in 5.6% of oral olanzapine patients (average 2.8-kg gain) compared to 0.8% of placebo patients (average 0.4-kg loss); 29% of olanzapine patients gained >7% of their baseline weight, compared to 3% of placebo patients. During continuation therapy (238 median days of exposure), 56% of patients met the criterion for having gained >7% of their baseline weight. Average gain during long-term therapy was 5.4 kg.

Laboratory Changes—Olanzapine is associated with asymptomatic increases in SGPT, SGOT, and GGT and with increases in serum prolactin and CPK (*see* PRECAUTIONS). Asymptomatic elevation of eosinophils was reported in 0.3% of olanzapine patients in premarketing trials. There was no indication of a risk of clinically significant neutropenia associated with olanzapine in the premarketing database.

In clinical trials among olanzapine-treated patients with baseline random triglyceride levels of <150 mg/dL (N=659), 0.5% experienced triglyceride levels of ≥500 mg/dL anytime during the trials. In these same trials, olanzapine-treated patients (N=1185) had a mean triglyceride increase of 20 mg/dL from a mean baseline of 175 mg/dL. In placebo-controlled trials, olanzapine-treated patients with baseline random cholesterol levels of <200 mg/dL (N=1034) experienced cholesterol levels of ≥240 mg/dL anytime during the trials more often than placebo-treated patients (N=602; 3.6% vs 2.2% respectively). In these same trials, olanzapine-treated patients (N=2528) had a mean increase of 0.4 mg/dL in cholesterol from a mean baseline of 203 mg/dL, which was significantly different compared to placebo-treated patients (N=1415) with a mean decrease of 4.6 mg/dL from a mean baseline of 203 mg/dL.

ECG Changes—Analyses of pooled placebo-controlled trials revealed no statistically significant olanzapine/placebo differences in incidence of potentially important changes in ECG parameters, including QT, QTc, and PR intervals. Olanzapine was associated with a mean increase in heart rate of 2.4 BPM compared to no change among placebo patients.

Other Adverse Events Observed During Clinical Trials—The following treatment-emergent events were reported with oral olanzapine at multiple doses ≥1 mg/d in clinical trials (8661 patients, 4165 patient-years of exposure). This list may not include events previously listed elsewhere in labeling, those events for which a drug cause was remote, those terms which were so general as to be uninformative, and those events reported only once or twice which did not have a substantial probability of being acutely life-threatening. *Frequent* events occurred in ≥1/100 patients; *infrequent* events occurred in 1/100 to 1/1000 patients; *rare* events occurred in <1/1000 patients. ***Body as a Whole***—*Frequent:* dental pain, flu syndrome; *Infrequent:* abdomen enlarged, chills, face edema, intentional injury, malaise, moniliasis, neck pain, neck rigidity, pelvic pain, photosensitivity reaction, suicide attempt; *Rare:* chills and fever, hangover effect, sudden death. ***Cardiovascular***—*Frequent:* hypotension; *Infrequent:* atrial fibrillation, bradycardia, cerebrovascular accident, congestive heart failure, heart arrest, hemorrhage, migraine, pallor, palpitation, vasodilatation, ventricular extrasystoles; *Rare:* arteritis, heart failure, pulmonary embolus. ***Digestive***—*Frequent:* flatulence, increased salivation, thirst; *Infrequent:* dysphagia, esophagitis, fecal impaction, fecal incontinence, gastritis, gastroenteritis, gingivitis, hepatitis, melena, mouth ulceration, nausea and vomiting, oral moniliasis, periodontal abscess, rectal hemorrhage, stomatitis, tongue edema, tooth caries; *Rare:* aphthous stomatitis, enteritis, eructation, esophageal ulcer, glossitis, ileus, intestinal obstruction, liver fatty deposit, tongue discoloration. ***Endocrine***—*Infrequent:* diabetes mellitus; *Rare:* diabetic acidosis, goiter. ***Hemic and Lymphatic***—*Infrequent:* anemia, cyanosis, leukocytosis, leukopenia, lymphadenopathy, thrombocytopenia; *Rare:* normocytic anemia, thrombocythemia. ***Metabolic and Nutritional***—*Infrequent:* acidosis, alkaline phosphatase increased, bilirubinemia, dehydration, hypercholesteremia, hyperglycemia, hyperlipemia, hyperuricemia, hypoglycemia, hypokalemia, hyponatremia, lower extremity edema, upper extremity edema; *Rare:* gout, hyperkalemia, hypernatremia, hypoproteinemia, ketosis, water intoxication. ***Musculoskeletal***—*Frequent:* joint stiffness, twitching; *Infrequent:* arthritis, arthrosis, leg cramps, myasthenia; *Rare:* bone pain, bursitis, myopathy, osteoporosis, rheumatoid arthritis. ***Nervous System***—*Frequent:* abnormal dreams, amnesia, delusions, emotional lability, euphoria, manic reaction, paresthesia, schizophrenic reaction; *Infrequent:* akinesia, alcohol misuse, antisocial reaction, ataxia, CNS stimulation, cogwheel rigidity, delirium, dementia, depersonalization, dysarthria, facial paralysis, hypesthesia, hypokinesia, hypotonia, incoordination, libido decreased, libido increased, obsessive compulsive symptoms, phobias, somatization, stimulant misuse, stupor, stuttering, tardive dyskinesia, vertigo, withdrawal syndrome; *Rare:* circumoral paresthesia, coma, encephalopathy, neuralgia, neuropathy, nystagmus, paralysis, subarachnoid hemorrhage, tobacco misuse. ***Respiratory***—*Frequent:* dyspnea; *Infrequent:* apnea, asthma, epistaxis, hemoptysis, hyperventilation, hypoxia, laryngitis, voice alteration; *Rare:* atelectasis, hiccup, hypoventilation, lung edema, stridor. ***Skin and Appendages***—*Frequent:* sweating; *Infrequent:* alopecia, contact dermatitis, dry skin, eczema, maculopapular rash, pruritus, seborrhea, skin discoloration, skin ulcer, urticaria, vesiculobullous rash; *Rare:* hirsutism, pustular rash. ***Special Senses***—*Frequent:* conjunctivitis; *Infrequent:* abnormality of accommodation, blepharitis, cataract, deafness, diplopia, dry eyes, ear pain, eye hemorrhage, eye inflammation, eye pain, ocular muscle abnormality, taste perversion, tinnitus; *Rare:* corneal lesion, glaucoma, keratoconjunctivitis, macular hypopigmentation, miosis, mydriasis, pigment deposits lens. ***Urogenital***—*Frequent:* vaginitis*; *Infrequent:* abnormal ejaculation,* amenorrhea,* breast pain, cystitis, decreased menstruation,* dysuria, female lactation,* glycosuria, gynecomastia, hematuria, impotence,* increased menstruation,* menorrhagia,* metrorrhagia,* polyuria, premenstrual syndrome,* pyuria, urinary frequency, urinary retention, urinary urgency, urination impaired, uterine fibroids enlarged,* vaginal hemorrhage*; *Rare:* albuminuria, breast enlargement, mastitis, oliguria. (*Adjusted for gender.)

The following treatment-emergent events were reported with intramuscular olanzapine for injection at one or more doses ≥2.5 mg/injection in clinical trials (722 patients). This list may not include events previously listed elsewhere in labeling, those events for which a drug cause was remote, those terms which were so general as to be uninformative, and those events reported only once or twice which did not have a substantial probability of being acutely life-threatening. ***Body as a Whole***—*Frequent:* injection site pain; *Infrequent:* abdominal pain, fever. ***Cardiovascular***—*Infrequent:* AV block, heart block, syncope. ***Digestive***—*Infrequent:* diarrhea, nausea. ***Hemic and Lymphatic***—*Infrequent:* anemia. ***Metabolic and Nutritional***—*Infrequent:* creatine phosphokinase increased, dehydration, hyperkalemia. ***Musculoskeletal***—*Infrequent:* twitching. ***Nervous System***—*Infrequent:* abnormal gait, akathisia, articulation impairment, confusion, emotional lability. ***Skin and Appendages***—*Infrequent:* sweating.

Postintroduction Reports—Reported since market introduction and temporally (not necessarily causally) related to olanzapine therapy: allergic reaction (eg, anaphylactoid reaction, angioedema, pruritus or urticaria), diabetic coma, jaundice, neutropenia, pancreatitis, priapism, rhabdomyolysis, and venous thromboembolic events (including pulmonary embolism and deep venous thrombosis). Random cholesterol levels of ≥240 mg/dL and random triglyceride levels of ≥1000 mg/dL have been reported.

DRUG ABUSE AND DEPENDENCE: Olanzapine is not a controlled substance.

Literature revised November 30, 2006

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Based on these arguments, the treatment team believed that working with Mrs. C and, if necessary, informing her of her son's location outweighed the conflicting need to maintain his right to confidentiality.

Therapeutic resources

Catastrophes evoke powerful emotions that can blur responders' therapeutic boundaries and interfere with how we care for individuals in need (***Table 2, page 72***).[13] Some Web-based resources to help you prepare for disasters are available from:

- American Psychiatric Association. www.psych.org/disasterpsych.
- Centers for Disease Control and Prevention. www.bt.cdc.gov/mentalhealth.
- Duke University. http://psychiatry.mc.duke.edu/clinical/disastermentalhealth.html.

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