When a Disaster Strikes: Access to Medications?

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Conflicts of Interest

• Dr. Ehret has no actual or potential conflicts of interest and no relevant financial interests associated with this presentation.
Pharmacist and Technician Objectives

• Describe pre-disaster planning for healthcare professionals, in particular for pharmacies
• Review medication supply chains and consider weak points in the chain
• Describe a needs assessment for a patient prior to a disaster
• Outline a disaster planning guide for a pharmacy setting

What type of practice setting are you currently working in?

• A. Community Pharmacy
• B. Hospital Pharmacy
• C. Advance Practice/Clinical Setting
• D. Academia
• E. Industry
• F. Government
• G. Veterans Affairs
• H. Other
Types of Events

- Natural Disaster
- Man‐made Disaster
- Terrorist Event
- Complex Humanitarian Emergency
- War Occupation
- CBRNE Events

"Drug Refugee"

- Minor Disaster
  - Power Outage
  - No pharmacist today
  - Evacuation
  - Riots/Protests
- Major Disaster
  - Flooding
  - Hurricanes
  - Earthquake
  - Tsunami
Minor Disaster Question

- Thunderstorm with major wind damage in a local town. Power is out at one of the major hubs and the independent pharmacy that everyone in town uses is closed. A major retail chain in the next town over has power.
- Patient presents to the major retail chain with a bottle for warfarin from the independent and states, “I am out of medication and my pharmacy is closed.”
- What do you do?

Minor Disaster Question

- A. Turn the patient away- you can’t call for a transfer due to the independent being closed
- B. Provide the patient with 3 days worth free of charge
- C. Provide the patient with an entire refill- worry about the transfer when the independent reopens
- D. Call the provider to obtain a new script for the medication to fill
Minor Disasters

• Pharmacies might not be open
  – Can I fill my prescription at any pharmacy that is open in town?
  – I don’t have my insurance card
  – I lost my prescription in the process
  – My pharmacy filled it, I didn’t pick it up yet, now they are not open
  – My medications were left out of the fridge, can I get new ones?
  – I am due for an injection, but my provider is not open or only doing telehealth

Major Disasters

• No medications available
  – Pharmacies are closed
  – Specialty medications- mail is slowed or stopped
  – Medications are expired- no fridge services available
  – No medications coming into area
  – Disruption in supply chains
• Back order of medications
  – Medication is unable to be made- example IV fluids/sterile water
    Hurricane Maria
  – Concerns over raw ingredients and drug supply manufacturing locations
• No providers to prescribe medications
  – Provider may not know medication history
  – Provider may be uncomfortable with certain medications (e.g. could a psychiatrist prescribe oncology medications?)
Supply Chains

• Social and technical system by which demand is identified, targeted, and fulfilled

• Process of deciding what, when, and how much is to be moved where

Ritchie EC et al. Current Psychiatry 2019
Commercial Supply Chain

Disaster Occurs

Ritchie EC et al. Current Psychiatry 2019
Questions to Consider

• Do I have a clear understanding of what medications would be available through relief efforts? What is expected timetable would be for their restoration?
• What basic formulary should I anticipate?
• In case of an interruption in medication supply, which of my patients are likely to have the most severe discontinuation syndromes?
• What are my ethical and professional duties?

Ritchie EC et al. Current Psychiatry 2019

Questions to Consider

• Should I be considering maintaining a supply of certain medications? How do decision?
• If I opt to maintain a small supply of certain medications, do I know what I need to know to execute that plan? (e.g., securing of pharmaceuticals, expiration, temperature)
• For long-term stability-maintenance patients, what is a reasonable degree of disaster planning education/discussion?

Ritchie EC et al. Current Psychiatry 2019
Questions to Consider

• What could be the short-term and mid-term impacts of not having access to the electronic medical record be in may particular practice?

• How have other providers dealt with these questions in previous disasters?

Ritchie EC et al. Current Psychiatry 2019

Assessment of Where You Stand

Preparation → Disaster → Mitigation → Response → Recovery → Preparation
Reasons to do an Assessment

• Develop a strategic plan

• Reports to command, families, media

• Apportion resources

• Target interventions

2017-2022 HealthCare Preparedness and Response Capabilities; Dept. of HHS

Needs Assessment

• Individual

• Group

• Population
  – Consider vulnerable populations
    • Chronically mentally ill
    • Physically ill
    • Disabled

2017-2022 HealthCare Preparedness and Response Capabilities; Dept. of HHS
Basic First Assessment of Physical Needs

- Number affected
- Shelter
- Food
- Wounds/Illnesses
- Infectious Disease
- Medications available
- Fuel
  - Heating
  - Cooking
- Continued violence
- Mass fatalities

2017-2022 HealthCare Preparedness and Response Capabilities; Dept. of HHS

Assessment of Health Needs

- Vulnerable populations
  - Mentally ill
  - Children
  - Prisoners
  - Wounded
  - Bereaved
- Medications
- Hospital Beds
  - General
  - ICU
  - Medical surge
  - Psychiatry

2017-2022 HealthCare Preparedness and Response Capabilities; Dept. of HHS
Assessment of Health Needs

- Try to gain as much information as possible before departure to affected site
- On the ground assessment usually necessary
- Persons to talk to
  - Schools
  - Hospitals
  - Clergy
  - Community leaders
  - Shelters

2017-2022 HealthCare Preparedness and Response Capabilities; Dept. of HHS
Assessment Question

• In your current place of employment, have you ever had training in disaster planning?

• A. Yes
• B. No
• C. I might have, but I can’t recall

Completing the Assessment
Disaster Assessment

• Identify your team
• Identify risks and needs (SWOT)
  – Access to regional healthcare resources
  – Prioritize resource gaps and mitigation strategies
  – Consider vulnerable populations
  – Regulatory compliance

2017-2022 HealthCare Preparedness and Response Capabilities; Dept. of HHS

Disaster Assessment

• Develop Preparedness Plan
  – Healthcare and medical response coordination
  – Emergency operations plan
  – Communications
  – Essential functions
    • Different for each setting
    • Supply chains
    • Finance functions
    • Sheltering in place
    • Protecting healthcare information systems and networks
    • Protecting responders’ safety and health
  – Healthcare evacuation and relocation

2017-2022 HealthCare Preparedness and Response Capabilities; Dept. of HHS
Disaster Assessment

• Recovery Plan

• Train and prepare the healthcare medical workforce

• Ensure preparedness is sustainable

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Examples/Thoughts for Discussion
Psychiatric Issues-Acute

• Stress as a reaction
• Additional fear of unknown with CBRNE
• Changes in mental status secondary to any agents
• Medical triage
• Quarantine, reverse isolation
• Loss, grief
• Under-reactions

Ritchie EC et al. Current Psychiatry 2019

“Drug Refugees”

• Limited to no medications
• Withdrawal symptoms
• Symptoms return
• Self inflicted harm
• Psychosis
• Cravings

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Opioid Withdrawal

Early
• Watery eyes
• Runny nose
• Sweating
• Anxiety/Irritability
• Poor sleep
• Muscle pain

Later
• Cramping
• Diarrhea
• Vomiting
• Increased heart rate and blood pressure
• Restlessness
• Shakiness
• Chills
• Sweating
• Goose bumps
• Dilated pupils

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Katrina Behavioral Health Needs

• Chronically mentally ill off medications
  – Note: psychiatric medications not in stockpile
• Displaced psychiatrists and populations
  – Volunteers needed
  – Issues of housing, transportation
• Louisiana National Guard
  – All flooded to the “crash site”
• Importance of pets
• Long term issues of “diaspora”

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Solutions

Patient
- Refills prior to disaster (personal stockpile)
- Emergency kit prepared to grab if you need to go quickly
- Stock medications in multiple places - office, home, family members house
- Carry medication list with current and past medications, allergies, and provider contact information

Provider
- Develop emergency plans for injections, blood draws, and other time sensitive monitoring
- Provide patients with medication lists
- Discussions with patients to be prepared

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Oath of a Pharmacist

I promise to devote myself to a lifetime of service to others through the profession of pharmacy, to fulfilling this vow

I will consider the welfare of humanity and relief of suffering my primary concern.

I will apply my knowledge, experience, and skills to the best of my ability to ensure optimal outcomes for my patients.

I will respect and protect all personal and health information entrusted to me.

I will accept the lifelong obligation to improve my professional knowledge and competence.

I will hold myself and my colleagues to the highest principles of our profession's moral, ethical, and legal conduct.

I will embrace and advocate changes that improve patient care.

I will utilize my knowledge, skills, experiences, and values to prepare the next generation of pharmacists.

I take these vows voluntarily with the full realization of the responsibility with which I am entrusted by the public.

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