

# Disaster Relief: A Look Into the Pharmacist's Role

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After hurricane Matthew devastated southeastern North Carolina on October 8, 2016, health care providers and medical volunteers from various regions in North Carolina and from other surrounding states pulled together to initiate emergency medical services. Along with other healthcare providers, pharmacists played a key role in relief efforts. By using their broad knowledge of medicine and healthcare to efficiently utilize limited resources, pharmacists were vital in providing patient care. Their skills and knowledge make them a valuable resource in disaster relief.

The World Health Organization defines the mission of pharmacy practice as actively promoting health by ensuring that medications are safe, efficacious, and optimized [1]. The goals of pharmacy practice are applied when pharmacists identify opportunities to improve health promotion and/or optimize pharmaceutical care. As stated in the American Pharmacists Association's pharmacists' code of ethics, pharmacists are professionals who not only dispense medications but also have an "obligation that may extend beyond the individual to the community and society" [2]. Traditionally, pharmacists have been known for their role as dispensers. But with health care shifting towards a more team-based approach, the role of the pharmacy practice and pharmacists are moving beyond pharmacy doors.

## Nontraditional Roles

While dispensing medications is still a primary role of pharmacist practice, pharmacists' expansive knowledge of pharmaceutical care and health care enhances their abilities to contribute to collaborative patient care [3]. Nontraditional roles for pharmacists can include careers in public health, industry, government, hospice, consulting, and in clinical settings such as medical offices. The integration of pharmacists into nontraditional roles, such as medication therapy management in chronic disease states, has shown to improve clinical outcomes, increase adherence, and reduce costs [3, 4]. Public health is a career field for pharmacists that is currently expanding in both opportunity and scope. As pharmacists are available nearly 24 hours a day, they can constantly serve as a resource for information about medications, disease states, and over the counter drug

recommendations. Regardless of the practice site, a pharmacist's knowledge can assist health care providers in making decisions when ideal resources are not always available. Many times, pharmacists can identify alternative therapies or resources to achieve health care goals when resources are limited. This is a primary example of how pharmacists can get involved in disasters. After a disaster, resources are limited and the pharmacist's knowledge of alternative therapies can help facilitate patient care.

## Pharmacists' Role in Disaster Relief

Embracing and understanding how to proceed with medical care in a state of emergency is no easy feat for any health care provider. Early establishment of efficient management is imperative. Operations during a disaster are anything but typical and may be contingent upon the available working population and resources. This means in remote areas there could possibly be two to three providers left to supply care for an entire small town. The limitations proposed during an emergency require health care providers to understand the demographics of the affected population, available resources, and how to conserve resources.

Over the past several decades, pharmacists have been involved in many disaster relief efforts nationwide and worldwide, including Hurricane Katrina (2005), Hurricane Sandy (2012), and Hurricane Matthew (2016) [5]. During an emergency, resources may be limited and barriers to technology may exist. Meanwhile, constraints in access to medication, medical supplies, medical records, and storage areas for medications with special directions may present further complications. Pharmacists are a great resource and can help alleviate many of these issues by interviewing, triaging, and assessing patient needs for treatment, in addition to having immediate access to medications [3, 4]. With pharmacists being one of the most accessible health care providers, it is vital for pharmacists to understand how their practices may be influenced during an emergency. Pharmacies are located

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in visible areas throughout most communities and some community pharmacies are even open 24 hours. Unlike doctor and hospital visits which require appointments, pharmacists have the potential to provide care throughout the day and night without any appointment. For example, during Hurricane Matthew, hundreds of displaced individuals were relocated and many were separated from their medications due to the urgency of the evacuation. As health care teams collaborated, the accessibility to community and hospital pharmacies created medication access points, which increased the care that patients could receive. While many over the counter medications were received from community donations, prescription drugs were donated by various doctor's offices, and chain, hospital, and independent pharmacies.

### ***Hurricane Matthew***

On October 8, 2016, Robeson County, North Carolina and surrounding counties were devastated by Hurricane Matthew. Several shelters were set up around Robeson County for those who were most impacted by the storm. With thousands of people wondering where their next meal or shower would come from, health care providers from various hospitals, practices, and pharmacies came together to set up health care clinics at survivor shelters to provide care and access to medications. Similar to what occurred during Hurricane Katrina, the implementation of the clinics and medication access provided by pharmacies provided support that offset the amount of non-emergent 911 calls and emergency department visits [5].

When evaluating the health care needs of this population, it was important to note that many had chronic disease states that if left untreated could potentially increase their risk of mortality. Many of the patients that were cared for at the survivor shelter were not usually cared for by the providers or pharmacists who volunteered at the clinic. The population lacked patient-provider relationships and also had recognizable limited health literacy. With no access to medical records or history and limited medical supplies and medication availability, being able to proficiently communicate was potentially one of the most essential pieces to implementing a focused, safe, and effective care process.

It was critical to identify and record the population's needs and the resources available to meet those needs before any supplies or medicine was dispensed. Patients were assessed and a reasonable effort was made to gather pertinent health information. As the clinic received various over the counter medication donations from local hospitals, pharmacies, and community members, organizing and dividing resources became a priority. Prescriptions that were unable to be filled with donated medications and were not available through onsite paramedics were sent to a local pharmacy that volunteered to fill certain medications at no

cost. Through the collaboration of the local pharmacies and utilization of donated medications, many patient medical issues were managed onsite, reducing the expenditure of reserved resources. Additionally, the identification of alternative therapies that were on hand for disease states such as high blood pressure, diabetes, and asthma were critical in reducing resource use.

### ***Expanded Roles in North Carolina***

During declared emergencies, the North Carolina Board of Pharmacy ensures that pharmacists are able to maximize their resources and skills to provide care. In a state of emergency, North Carolina law expands pharmacists' abilities to ensure that the patients in the extenuating circumstances are able to receive care. Pursuant to North Carolina General Statute §58-3-228, during a state of emergency or disaster a waiver or override may be issued to provide exemption from the "refill too soon" prohibition so that a one-time refill or replacement fill may be issued. The statute also states that all insurance carriers licensed to provide coverage in counties of a declared state of disaster or state of emergency are required to provide prescription coverage, so long as the person requesting the fill resides in one of the counties and the prescription was requested within 29 days after the origination of the waiver [6]. This law helps alleviate early filling restrictions and assures patients are able to access their medications.

While all of the above mentioned issues are pertinent, North Carolina pharmacists can become involved in these efforts through various avenues including registering to volunteer during licenses renewal and joining a North Carolina State Medical Assistance Team (SMAT). There are also opportunities for pharmacists to join federal-level Disaster Medical Assistance Teams (DMAT) and register through the Medical Reserve Corps.

### **Conclusion**

As the role of pharmacists expands throughout health care, utilizing their full skill set during disaster could increase the provisions of health. With a specialized understanding of drugs, pharmacists can easily integrate into disaster relief efforts and provide direct access to essential resources. Not only can they provide access to drugs, but they also possess skills that can integrate them to fulfill certain roles if provider shortages exist [7]. Pharmacists have the ability to perform general health screenings, ensure pharmaceutical resources are appropriately and safely expended, disseminate medical information, triage, ensure appropriate storage conditions of pharmaceutical products, and provide immunizations. As natural disasters and emergencies are inevitable and demand for health care providers during these times are high, pharmacists can aid in bridging the health care gap. NCMJ

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