Challenges to Prehospital Care in Honduras

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DOH: Department of Health
EMS: Emergency Medical Services

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Abstract

Through a longitudinal field experience and interviews with rural and urban clinic workers in Honduras, the following data were collated regarding the challenges to prehospital Emergency Medical Services (EMS) in this country. In Honduras, both private and public organizations provide prehospital emergency care for citizens and face both financial and resource constraints. These constraints manifest in operational concerns such as challenges of integration of EMS systems with each other, differences in medical direction oversight, and barriers to public access. Despite the availability of public health care services, authorities and locals alike do not recommend using the public systems due to lack of needed resources and time of emergency response.

Private volunteer EMS organizations are scattered throughout the country and each operates as their own separate system. There is no single dispatch center available, nor is there a guarantee that calling for EMS will result in the patient's desired response. In this report, the challenges are discussed with possible solutions presented.

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Introduction

Honduras is a small country located in Central America with a population of almost nine million and is led by a presidential republic government. Within country, Emergency Medical Service (EMS) systems function independently at the public and private level. Within the public realm, two specific institutions maintain provision over health services: the Department of Health (DOH; Tegucigalpa, Honduras) and the Honduran Institute of Social Security (Tegucigalpa, Honduras).[1] The DOH is known to provide care for the population; however, these services are accessed by only 60% of the Honduran population.[1]

In addition, the Honduran Institute of Social Security, which provides medical support for those in need, covers approximately 18% of the working population of Honduras. Reportedly, the public health system, in general, is viewed by citizens to have a poorer quality of care and a higher rate of infection than the private system and is not the preferred choice of treatment. If personal finances allow residents to do so, individuals and families will seek private health care.[2]

Private health care organizations in Honduras are generally profit-based clinics and hospitals, while a small portion are volunteer or not-for-profit entities. These systems run independently and review their performance based on internal regulations and standards of each individual organization.[3] Volunteer organizations expect little to no funding from the patient themselves, while profit-based systems expect full payment of visit before termination of care.[3] If a patient is in severe critical condition, transportation may not be allowed due to the low chance of survival and excessive resources used.[4]

The private and public hospital care system is mirrored in the prehospital arena with multiple systems functioning independently. For example, a resident who wishes to activate EMS must know the specific number for the EMS company they are trying to reach due to the lack of a regional emergency dispatch and public safety answering point system. The public and private access numbers are based on location of the patient, and deployment of an ambulance reportedly can take hours.[3]

The following report on the challenges of prehospital care in Honduras was collated from observations and interviews with health clinic workers and residents during a longitudinal field experience in Comayagua, Honduras, while assisting in medical care in a rural health clinic providing primary, obstetrics, dental, and minor surgical care.

Report

Integration of Private and Public Health Care

In Honduras, public and private agencies work as separate entities. These organizations are not known to work together and access to these systems is chosen by the patient, which is normally based on the consumer's finances.[1] The majority of the health system in Honduras consists of a network of state-run hospitals, clinics, and centros de salud (health centers). Physicians, nurses, and specialists who staff these centers are government-contracted employees. Most major cities also have private and religiously affiliated hospitals and clinics which function independently.[5] Despite the presence of the government-run system, quality health care is mainly reserved for the upper classes who can afford private care. Those using the public sector can expect long waiting times, unavailability of drugs, and lack of quality diagnostic and intervention techniques or equipment.[5]

The EMS system in Honduras also exists in both private and public entities with challenges of integration and organization. Unfortunately, little communication occurs between the public and private system, and the private system itself is composed of multiple independent organizations. Deployment of ambulances varies from company to company. Public ambulances are deployed from hospitals, while private units are dispatched from the clinic that owns them.[3] Each system contains their own set of rules and regulations. In addition to the separation of agencies, contact for each organization varies.

In Honduras, there is no universal number to call for emergency service, and different phone numbers for each company exist. Once a company is called, it may be three or four hours before the unit arrives at your location.[3] If the patient's likelihood of living is low, transportation may not be implemented.[4] Prehospital care provided through the public and private entities may be fragmented with little communication between agencies, making it a challenge to utilize a system approach to response.[1]

Based on the location of Honduras, damages from natural disasters pose a high-risk for general health and infrastructure.[1] While well-meaning, disaster relief programs, such as missionary teams, have played a role in disorganization and lack of integration.[6] After Hurricane Mitch (1998), organizations like the International Red Cross (Geneva, Switzerland), Doctors Without Borders (Geneva, Switzerland), and others came to Honduras with the intention of improving infrastructure and health throughout the country.[6] Many response teams traveled throughout the country with little to no access to communication with other organizations. Due to the challenges faced by these response organizations, resources and personnel deployed were unable to be utilized to their highest effectiveness.[3] Communication between the response organizations and the Honduran DOH has also been reported to be limited.[1]

Medical Direction

Currently, there is no national or regional medical direction system for EMS in Honduras. All private and public EMS agencies contain their own regulations and standards, and oversight of these standards is limited. The DOH, which is responsible for regulating the multiple EMS agencies, does not extend this regulation to medical direction or other systems issues.[1]

Current communications with health care providers suggest that the national standards of practice for EMS are unclear and quality assurance systems are limited. Though internal procedures of all organizations are approved by the DOH, national standards of practice have not been enforced and are therefore unknown to providers.[3]

Public Access

Access to EMS, primary care, and hospital-based care is limited in many regions of Honduras. This is exacerbated in the rural areas due to the mountainous topographical features of the interior highland area that tend to have little to no health care availability, while urban areas have a small number of hospitals and physicians.[6] During several visits over a period of three years, little to no access was witnessed within the interior highland region of Honduras.

Due to gaps in infrastructure, access to particular areas can sometimes be impossible. Lower-income families are often unable to obtain medical care because their primary residential locations sit within these rural areas.[6] Occasionally, residents located in rural Honduras, which makes up 51% of the country, walk to various clinics through the night in order to receive medical care in the morning. Upon arriving at a clinic, patients may be turned away due the lack of sufficient room and staffing within the medical facility.[6] In contrast, some people may not be able to reach a clinic due to not having adequate child care, the inability to miss work, or being too ill to walk.[6] This poses variation in the types of socioeconomic classes primarily provided with medical assistance.

Access to EMS in rural and urban areas is made more difficult by the lack of a universal access code or 9-1-1 system. Each organization, whether private or public, has their own designated number. Finding these numbers may be difficult while in rural areas, and therefore, one must be in the "know" in order to obtain this information.[3]

Discussion

Etiologies of the Challenges

The various challenges among prehospital care in Honduras may stem from lack of adequate finances, limited resources, and systemic disorganization. Amongst medical care, many systems are found to work with the same mission, but have not created a single, uniform system.[7] Therefore, care may be seen as disorganized or incomplete. In addition, the financial burden of merging these organizations and creating one large health care system may be unobtainable, preventing this collaboration to occur. Various solutions to condense inefficient health care delivery models while maintaining organizational individuality and financial reason are considered.

Public Access

Honduras does not have a universal emergency access number in place, which makes it difficult to receive medically appropriate services throughout the country. If one needs emergency services, they must know the appropriate number for which area they are trying to receive treatment in.[3] The development of one universal access number is essential to the advancement of EMS in Honduras. Once a number is established, methods of public education will need to be utilized to inform the public of how to access these services.

In addition to the lack of a universal access number, organizations have difficulty communicating with one another, preventing an integration of health systems throughout the nation.[3] In turn, many resources are misused due to the lack of basic organizational structure. Many calls are not accounted for and the lack of communications between companies does not allow for a single

research database to be created, which limits their quality assurance analysis capabilities.[8]

Integration of Health Systems

The economic situation in Honduras makes it challenging to provide appropriate public infrastructure that is necessary for emergency vehicles to equitably access patients. Many areas do not have adequate means of transportation (ie, roads or bridges) making EMS calls difficult to respond to. Only specific places have access to these facilities while those in the upper mountains must perform medical procedures themselves.[9] Occasionally, people from "unreachable areas" will walk to the nearest clinic to receive medical attention. However, once they reach a clinic, medical care is not guaranteed as it is based off of the number of patients already waiting to be seen.[3]

As shown previously, a comprehensive EMS system in Honduras has not yet been achieved.[1] In order to begin improving integration of the health system, three options may be considered. First, mutual aid agreements amongst ambulance services may be initiated. This will allow for greater area coverage and faster response times. If one unit is held up, a mutual aid agreement may help the surrounding areas and increase the patient's chance of survival. Second, a merge of public and private companies can be made, which would reduce inconsistencies pertaining to patient care. Many public services are unutilized due to the extreme risk of infection and lack of adequate care.[2] Merging public and private companies would evenly distribute funding throughout services while also maintaining a satisfactory level of training for each provider. Third, a single EMS agency may be created in which all EMS units run under the same procedures, policies, and administration. These steps could provide methods to ensure that all providers are monitored, calls are documented, and training is established throughout the system.

Medical Direction

Honduras EMS is currently not utilizing direct medical direction, and because of this, many facilities may not achieve minimum universal standards.[3] All organizations function based on their own individual standards and procedures, which has resulted in an inconsistency in the quality of emergency care provided throughout the nation. In order to assure appropriate quality of services, a single EMS system, if created, may encourage uniformity of procedures and operations pertaining to training and education.

Because a uniform medical direction system is not utilized, consistency of practice may be affected throughout the country.[1] The need for direction is inevitable and can be brought upon through various methods. First, a single medical director may oversee the practice of the whole country. This would assure equal treatment throughout systems, but it may overwhelm the person in charge. Second, each bordered area within the country may appoint a medical director. This would decrease the workload per director, but it may be nearly impossible due to lack of trained personnel in rural areas. Third, each individual organization could have a director, which would unfortunately lead to a continued separation of systems.

Limitations

Potential limitations of this report include convenience sampling that was utilized to gather information from available resources in the dynamic environment as opportunities presented themselves. Sources were also often dependent upon the available EMS and health care workers, instead of empirical, government-based data. In addition to the use of convenience sampling, it should also be noted that potential data are missing due to challenges in the EMS data infrastructure responsible for gathering this information and challenges with development of independent EMS organizations throughout the country.

Conclusion

Factors such as finances, resources, and operational means within the system may present as challenges within prehospital care in Honduras. Considering solutions to these challenges could assist in improving medical care provided throughout the country. Based on the current governmental and financial situation of Honduras, implementing a basic structure might help to consolidate the many agencies currently providing EMS, which would help to ensure adequate care throughout the country and decrease the chances of undirected medical procedures. This may take great amounts of time and energy, but if successful, could change countless lives throughout Honduras.

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