Insights on the effects of patient perceptions and awareness on ambulance usage in Karachi, Pakistan

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Introduction

- Developing countries such as Pakistan have a decentralized ambulance system. Decentralized ambulance services often provide only pre-hospital transport, but not medical care (Gallet et al., 1998).
- Karachi (pop. 18 million) is not adequately prepared to deal with its high rates of stroke, cardiovascular disease, and trauma (Siddiqui et al., 2009).
- The development of a proper system of pre-hospital care has many different components. Of particular importance are patient perceptions of ambulance services and proper awareness of the system in place.
- This study examines two of the main ambulance services in Karachi: Edhi and Aman.
- This study builds off of that one (Razzak, Cone, & Rehmani, 2001).

Methods

- Data was collected at the Aga Khan University Hospital Emergency Department. AKUH is a private 450 bed tertiary care facility with a 51 bed emergency department (ED) which sees approximately 48,000 patients per year.
- Patients were recruited in the AKUH ED via convenience sampling. 30 qualitative semi-structured interviews were conducted in Urdu with patients and their attendants.
- 10 patients came to the ED by Edhi ambulance
- 10 patients came to the ED by Aman ambulance
- 10 patients came to the ED by private transport
- All in-depth interviews were recorded and transcribed in Urdu. The interviews were translated into English, but the majority of the analysis was done using the original transcripts in Urdu to preserve the patient’s responses.

Results

Results Theme 1- Mistrust

Respondents had a perception that ambulances posed a risk to personal safety, and that ambulance drivers were trying to benefit themselves either by overcharging patients or by abusing the siren.

- “I’ve seen one thing very often that an ambulance has a siren for an emergency, and people no longer trust it because it is being used incorrectly.”

Many respondents also believed that ambulances would not show up on time when called, and that this resulted in people using other forms of transport to reach the hospital.

- “During my mother-in-law’s time we didn’t have a car so we had to call an ambulance for her and we had to wait for a while for the ambulance.”

Respondents also felt that ambulances instead of calling by going yourself you do find them.

Results Theme 2- Inadequacy

Respondents viewed the problems of the ambulance system as coming from the problems of society itself.

- “But [the ambulance provider] knows that if I keep some medicine [in the ambulance] it will get stolen. This is Pakistan’s system, unfortunately.”

Respondents viewed ambulances in Karachi as being inferior to those in other countries.

- “How can you compare their ambulances with Pakistan’s ambulances? It’s the difference between the Earth and sky.”

There was a wide range of expectations of ambulance quality in Karachi. Some of our respondents were satisfied with ambulance quality in Karachi.

- “The ambulance had everything in it, nothing more can be done. I’d just say that the thing for breathing, that was there. They had air conditioning too…”

Some respondents had higher expectations of what should be available in ambulances in Karachi.

- “First of all, they should have paramedical staff. And they should have everything from oxygen to a suction machine.”

Results Theme 3- Lack of Awareness

Patients responded with a certain level of fear when asked if they had come to the hospital by ambulance. The view that ambulances transport only the critically ill or the dead was pervasive.

- “Firstly it doesn’t have that good of a feeling. It gives you a bad feeling that a person is going in an ambulance.”

Many respondents did not know how to contact ambulance services.

- “Someone we know called them. He [my husband] was sick and my son is young.”

Most respondents viewed ambulances as a form of transport for those with less money.

- “Those poor people who don’t have their own private car, these people mostly choose ambulances.”

Respondents did not view ambulances as a medical facility, but rather as a form of transport similar to a taxi.

- “Often, the lower class thinks that instead of a taxi, it’ll take an ambulance, because the poor things…they’ll want to save.”

Conclusions

- The influences of mistrust in the ambulance system and its providers, a feeling that local systems are inadequate, and a fundamental misunderstanding of the role of ambulances in pre-hospital care result in a delay or lack of desire to call an ambulance even when a health emergency is recognized.
- Improvements and changes to the ambulance services themselves in Karachi will have limited impact unless people’s perceptions about the importance and role of ambulances in pre-hospital care are modified concomitantly.
- Lack of knowledge about the availability of ambulance services in Karachi and lack of awareness about the role of ambulances in providing pre-hospital care leads to delay in invoking the EMS system until late in the illness spectrum, thereby missing earlier opportunities to intervene and assist in the care of the patient. In order to improve the usage of the system of pre-hospital care in Karachi, education regarding how appropriate care delivered in a properly equipped ambulance can impact the outcome of a patient is critical.
- This study highlights some of the areas in which patient education must focus in order to improve the image and use of ambulance services in Karachi and other resource-limited settings. This study also gives unique insight into people’s perceptions of ambulance services in a developing country setting.

Acknowledgements

Dr. Kiran Ejaz, Dr. Junaid Razzak, Dr. Muhammad Baqir, Dr. Nukhba Zia, Rubaba Khan, and Sana Siddiqui at the Aga Khan University Hospital Department of Emergency Medicine

Dr. Aruna Chandran and Dr. Adrian Hyder at the Johns Hopkins Bloomberg School of Public Health International Injury Research Unit

The Woodrow Wilson Undergraduate Research Fellowship at the Johns Hopkins University

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