


A story to tell or not, a glimpse of emergency setting in the low economic country: experience sharing and Review

Sunil Kumar Das¹, Sajal Twanabasu²

¹MD GP/EM, Nick Simons Institute, Rampur Hospital, Rampur, Palpa, Nepal

²MD Pediatrics, Dhading Hospital, Nilkantha Municipality, Dhading, Nepal

ABSTRACT

Delivering efficient emergency health care in low-income countries presents significant challenges due to various factors, including limited resources, inadequate infrastructure, and socio-economic barriers. This article explores the complexities associated with emergency care delivery in resource-limited settings. Issues such as prehospital care, triage, waiting times, out-of-pocket expenditures, and the implementation of international protocols with limited resources. The lack of access to well-equipped ambulances, trained personnel, and basic first aid knowledge contributes to the difficulties faced in prehospital care. Non-functional triage systems, direct access to emergency rooms, and financial constraints further hinder timely and effective patient care. The implementation of international protocols in settings with limited resources poses additional challenges for healthcare providers and patients.

Keywords: ambulance, healthcare, health system, low economic country, triage

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CORRESPONDENCE

Dr. Sunil Kumar Das

Dept. of General Practice & Emergency Medicine

Nick Simons Institute, Nepal

Email: res.sunilkumardas@pahs.edu.np

Experience

We encounter many cases as an emergency physician, every case has story, some stories are told and most of them are gone unnoticed. Here I am going to share a story about a case and glimpse of the emergency room and resuscitation bay in our setting. It was 4 am; emergency room of the tertiary center was hustling with its usual chaos, both of the resuscitation bed numbered 1 and 2 were occupied by patients requiring Intensive care unit (ICU) care, patient family were busy making calls searching for ICU. Attention of all the doctor on the floor was caught by the patient that had just arrived, 68-year-old male from a periphery village 3 hours' drive from the capital city presented, accompanied by his grandson to emergency at 4 am in the morning, with chief complaint of vomiting fresh blood 3 to 4 episodes for 6 hours. Generalized Pain abdomen for 4 to 5 days. Apart from this, we could not elaborate any details. On general examination Glasgow coma scale (GCS) was 13/15, delayed response, pale with blood stains all over his clothes. Blood pressure was not recordable, pulse rate 140/min, regular and feeble, temperature 96°F, SpO₂ 70% at room air, and 90% with face mask at 5 l/min. We initially fluid-resuscitated the patient and later added vasopressor. Systolic blood pressure of 70 mm of Hg was recorded and we were planning for blood cross match and transfusion by that time patient was again vomiting blood and collapsed. Since the resuscitation bed were already occupied we had to move one to the lesser sick patient to make way for this patient. All the doctors on the emergency department were summoned to assist in resuscitation and intubation. The patient was eventually intubated and CPR was performed side by side with verbal consent. With every second patient was drowning in his own blood, every second heart was failing to pump the blood. With every chest compression, the patient vomited blood. After 20 minutes of rigorous attempts, and with mutual understanding with the patient family, cardiopulmonary resuscitation was stopped. The patient eventually succumbed to death.

Despite not personally knowing the patient, every death evokes a sense of failure, sadness, and renders our efforts futile, which raises doubts about our competence as physicians. But it gives us opportunity to learn something new, and makes us strong as an individual and institution. In emergencies, we encounter a multitude of challenges, including incomplete or absent medical history, lack of past investigations or diagnoses, uncertain nil per oral status, and most significantly,

limited options. The patients' relatives live in fear of losing their loved ones, often experiencing denial, aggression, and impulsive behavior. At times, we find ourselves just as bewildered as the patient's family.

This was the story of a male from the periphery of the capital city; he stayed for around 1 hour in a hospital and succumbed to death. We have been seeing many things recently mass road accidents, myocardial infarction at younger ages, epidemics, pandemics, earthquakes. It could have been anyone from capital city itself, my own neighborhood and home and family.

“We all may need this bed for ourselves or our dear ones at some point of time in our life”

Review of Literature

We are lacking in various aspects of health care and need to improve, such as pre-hospital care, trauma care, disaster management, central electronic health recording system, referral system, education related to clinical services, effective health insurance proper triaging. Similarly, inadequate pre-hospital care, emergency care services, transportation infrastructure, longer waiting time in the hospital, inadequate basic and ICU beds, and unreliable consumable and medical supplies present significant challenges in emergency and critical care.¹ These are a few issues, but the list goes on.

Delivering efficient emergency and urgent health care for injuries, trauma, medical and surgical emergency, non-communicable disease, and other condition in a resource-limited setting are difficult.² people often present late to a health professional because of array of personal, sociocultural and economic factor, a lack of knowledge about signs and symptoms of the disease.^{3,4}

Prehospital care is almost non-existent in low-income countries and utilization are often low, bystanders, volunteer commercial drivers provides majority of prehospital transport and also provide majority of first aid.⁵ In our country with population of 30 million, there exists fewer than 30 well equipped ambulance with trained man power; remaining are patient carrying vehicle with oxygen and driver who may not have basic first aid knowledge.⁶ Many of these developing nations do not have adequate hospitals, living conditions, transportation, or education standards it is very difficult to implement an EMS system into these areas.⁷ Community based interventions to spread

awareness about disease and its symptoms are crucial for timely hospital transfer.⁸

Triage is classifying and prioritizing the patient presenting to emergency department on the basis of severity of symptoms and needing medical attention. In western countries average waiting time is around 30 minutes to 4 hours before they can be seen by health care worker.⁹ In our setting patient are directly directed to emergency room despite of unavailability of beds and overcrowding in emergency. Patient and patient family can have direct access to emergency room, which leads to non-functional triage. Apart from triage out of pocket expenditure is also greater hurdle for better patient care. We are at early phase of health insurance with attempts to improve universal health coverage, but still most healthcare utilization is financed by out of pocket payment with detrimental effects on poorest and needy patients.¹⁰ Similarly financial issues have hindered timely patient care.

Implementation of international protocol in the local setting with limited resources is challenge itself to the healthcare provider and patient.^{11–13} In addition, availability of hi-tech lifesaving gadget is to be made accessible to ground root patient. Similarly, we need to strengthen surveillance system for availability of critical care bed and manpower throughout the country. There are large gaps and potential for universally deployed basic emergency care packages and facility development, pre-hospital care, and communication in resource limited setting.²

CONCLUSION

The story sheds light on the complexities and shortcomings of emergency medicine in resource-limited settings, highlighting the ongoing efforts needed to address these issues. Bridging the gaps in critical care bed availability, strengthening surveillance systems, electronic medical recording and improving communication are crucial steps toward improving emergency healthcare in low-income countries.

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