

EDITORIAL

Collaboration is the Key in Creating National Registries through Emergency Departments

Abdus Salam Khan, Sanniya Khan Ghauri

Registry is an ongoing collection of uniform data for a specific disease with predetermined inclusion and exclusion criteria to improve the morbidity and mortality and focus on prevention strategies for that disease.¹ It is part of a quality improvement initiative to address a specific problem. South East Asian countries such as India, Pakistan and Bangladesh have an accumulative population of almost half the world yet the research coming from this part is negligible with the least number of registries documented.^{2,3} The basic building block for the research is clean and unified data either from a single or multiple sources. Most of the data is lost within the chasm between public and private health care facilities. Data coming from single private healthcare institutes where affluent people have access, is not true representative of the population and cannot be used to generalize the disease burden of a nation. To prevent loss of valuable data, there is a dire need to establish national registries where each encounter with emergency department is documented. The task is monumental, with many challenges associated with implementation and sustainability but new innovative strategies with online data collection methods can be a way forward.

From emergency medicine perspective, creating a national trauma registry is a priority as 70% of all deaths occurring from injury occur in low middle-income countries (LMIC).⁴ More than 50% of the patients succumb to injuries before reaching hospital in Pakistan.² By developing a national registry, not only would we be able to ascertain that where the most trauma related events are presenting in terms of region but also what the dominant mechanism is such as motor vehicle accidents/ gunshot injury/ stabs/ falls etc. This registry would not only pave way to educate our physicians but also generate local data and base public health interventions and educational initiatives specific to each area. It is expected that such “needs based” public health initiative will garner better response as compared to blanket public health initiatives to prevent trauma/injury.

India created its first multicentre trauma registry in 2016 with 4 participating hospitals under the Australia-India Trauma Systems Collaboration (AITSC) partnership.⁵ Despite the need of a national trauma registry identified back in 2009, Pakistan still struggles to have a national trauma registry.⁶ Some of the challenges identified were acquisition of a registry software, commitment of all stakeholders for successful implementation, training of

the workforce, planning of a data collection strategy and validation of the data collected. Although Aga Khan University Hospital established Pakistan’s first local trauma registry but the goal to develop it at a provincial or national level is yet to be materialized.⁷ It is considered as one of the ten most productive trauma registries, in terms of publications, in LMIC.⁸ We can gain valuable insight from the pilot project “KITR- Karachi trauma registry” and implement in individual emergency departments to start collecting data at a national level.⁹ Similarly implementation of “Pakistan Registry of Intensive Care-PRICE” can also be a source of guidance in development of a local registry.¹⁰

Another important registry is Sudden Cardiac Death/ Out of hospital Cardiac Arrest registry. Important epidemiological data such as age of presentation, receiving bystander CPR, ROSC and survival to discharge can be generated from this registry.¹¹ The impacts of collecting this information would be paramount. It is only through these registries that enough evidence is collected to form national resuscitation guidelines and provide data to stakeholders to expand their efforts of educating masses about CPR and prehospital care.

Sepsis Registry would be another priority in the emergency departments as it still is the leading cause of morbidity and mortality specially in the developing world. With negligible primary health care facilities, emergency departments are the first point of contact in developing countries.

Similar registries can be created according to the burden of disease. AECOPD registry or UGIB registry are some novel ideas that can give us an idea about the burden of disease in our respective emergency departments. Infectious Disease is another important registry where vector borne diseases such as malaria/ dengue can be documented across the country. Collaboration can be done with national malaria program or other such initiatives by the government.

Generating this kind of data will help us manifold: the emergency physicians will be more aware of the local causes and prevalence, national guidelines can be formed on this data, public health stakeholders will know where the most benefit of an initiative would be, and we would be contributing to the data that the world requires from this region.

Collaboration will remain key in tackling this herculean task as it requires will of the stakeholders, dedicated trained personnel, investment in software, data collection and analysis. We propose to the stakeholders in each emergency department to study about various registries implemented in the country as well as other low-income settings such as Kenya, India etc. and start working on this highly neglected area of research.^{8,12} This data which can reflect the national trends and burden will also serve purposes other than research like resource allocation, disease forecasting, budgeting and public health decision making. Since information technology is much more advanced now as compared with before, a resource limited country like Pakistan should resort to collaborative work rather than resource intense solutions. It is high time to lead and start the process.

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