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View Point

Emergency Medicine in Bangladesh – An Evolving Concept

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The growth of emergency medicine around the globe has been tremendous, as expectation regarding quality of life and healthcare improves worldwide. The emergence and recognition of emergency medicine (EM) as a distinct discipline, with its own body of knowledge and skills, is a relatively recent development dating back to the 1970s. Canada was one of the first countries to recognize the uniqueness of EM and to develop formal training programs in the discipline.[1] Since then EM has evolved on a global level, and more than 18 countries have EM as a recognized specialty with training programs. Thirteen countries have formal board certification, 4 have formal fellowships in EM, 28 have national organizations and 27 are conducting research in the field.[2]

Health care in developing countries has not traditionally focused on emergency medical care in contrast to the fact that where injury rates are higher . [3] This only emphasizes the fact that greater attention is needed in developing countries, and fewer injury control activities have been undertaken.[4] Emergency care can make an important contribution to reducing avoidable deaths and disability, especially in low-and middle-income countries like ours. But unfortunately, this field is grossly neglected.

Emergency care needs to be well planned and supported at all levels of care, from the occurrence of an acute medical event in the community to the provision of appropriate care at the hospital.[5]

The basic concept is simple- providing service when it matters most-during emergency. Bangladesh has a population estimated to be nearly around 160 million but almost no emergency medical service in place till today. Provision of emergency to patients includes two major components: medical decision-making, and the actions necessary to prevent needless death or disability because of time-critical health problems, irrespective of the patient's age, gender, location or condition.[6]

Emergency medical care has three components: care in the community; care during transportation, which is related to the question of access; and care on arrival at the receiving health facility. It is designed to overcome the factors most commonly implicated in preventable mortality, such as delays in seeking care, access to a health facility, and the provision of adequate care at the facility.[7] The outcome of acute illness or injury is strongly influenced by early recognition of its severity and the need for medical intervention. Since most emergencies start at home, any system to promote the early recognition of emergency conditions should be based in the community. In order to save the lives of pregnant women it is important to reduce delays in accessing health care.[8] The importance of this step has been proved as Bangladesh won the MDG award for its affective community healthcare provision. There is virtually no data on the ability of community health workers to learn to recognize life-threatening emergencies other than maternal and paediatric conditions. If a health worker can be trained to recognize severe blood loss in a postpartum woman, or breathing difficulty in an infant, he or she can also be trained to recognize severe blood loss in a trauma victim, breathing difficulty in an asthmatic adult, or any life threatening injuries.[9]

Even after early recognition of any emergency, mode of transportation is equally important as in many instances there is an unwanted but unavoidable delay. There are many factors pertaining to this such as lack of appropriate vehicles, the absence or inadequacy of roads, and the inability to pay for transport services. In Bangladesh the concept of paramedics who can deal with emergencies while transporting is a still a dream and only three or four centers in the whole country can provide this sort of service. Unfortunately what we mostly have is large number of vehicles with ability to carry bodies. In many peripheral centers, even this support is still missing because they have only one vehicle provided by the government and when it is out with one patient the

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others are left without any help. And when privately owned vehicle is used, it is so expensive either most cannot afford it, and by the time they arrange the money it is already too late. The consequences of a lack of transport in emergency can be grave. In urban Guinea-Bissau, 20 of 125 acutely ill children died either on their way to hospital or while waiting in the reception area of an outpatient clinic.[10] Similar observations has been from Malaysia where a team assessing the value of the risk-coding system in pregnancy concluded that better communications, a more effective transport system, and better emergency care in hospitals were needed in order to reduce maternal mortality.[11] Providing emergency transport saves lives. In Sierra Leone, investment in a vehicle and an improved communication system led to a doubling of the utilization of emergency obstetric services and a 50% reduction in case fatalities. [12] In Monterrey, Mexico, an increase in the number of sites of ambulance dispatch from two to four and the provision of basic skills training in trauma care reduced deaths among patients en route to hospital.[13]

The ready availability of treatment on arrival at a formal health care facility is the third component of emergency medical care. Health care facilities differ widely in respect of equipment, staff and resources, and they consequently possess varying capacities to provide emergency care. For this reason the level of care which can reasonably be expected at a primary care centre is significantly lower than that available at a tertiary care hospital. Nevertheless, some capacity to provide emergency care should be available at every level of a country's health care system. But unfortunately most emergency services provided in Bangladesh are not adequate and the poor are mostly affected by this fact. We can point the finger at poverty, but answer to many questions are not there. Lack of logistics is one big important factor. Most of the ER in Bangladesh is presently functioning as just a traffic controller. Only one emergency physician is mostly found and his job is mostly to guide the patients toward the appropriate department, not give urgent resuscitation. The entire healthcare network is like this. And in most ER, adequate instrument is not present, supporting staffs are not properly trained to give CPR or do the basic triage when a patient arrives. To improve the scenario the policymakers are required to change the whole system.

Then comes the basic questions – Why this scenario are we? In Bangladesh, the basic concept of medical education is pro British due to the pre-colonial influence. The training received by physicians and other health care professionals are greatly different from that of modern day British medical faculties. All medical students in developing countries acquire their training and skills on the inpatient wards of large tertiary care hospitals in urban areas, where emphasis is placed on making the right diagnosis rather than on the principles of triage and emergency management. To avoid this we need to update medical colleges & nursing curriculum as the service is provided by both. Emergency medicine, Critical Care, CPR, all should be stressed appropriately to them. Development of distinct EMS Training Academy should be an utmost priority. The concept of emergency as separate faculty has started to take shape in Bangladesh with the society of emergency medicine established in Bangladesh. It developed with a motto to promote Education and Training in Emergency Medicine in Bangladesh. But still there is long way to go as even our neighboring countries including India has a very successful course in emergency medicine introduced in the post graduate level. We hope that our government recognizes emergency medicine as a specialty and postgraduate courses should be developed in our medical colleges.

The dynamic nature of emergency medical care has many faces. Physicians need to be the best who can work in teams, as the consequences of making a wrong decision or undertaking the wrong action may lead to further injury or even death. It is time we recognize emergency medicine as a distinct clinical discipline and develop skilled manpower so the people are not deprived of their basic human rights.

Conflict of Interest: None

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