Chapter-1

Introduction
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Kasturba Hospital, Manipal is a 2050-bedded tertiary care hospital with a centralised cardiopulmonary resuscitation (CPR) team, also called Code Blue team, based in Intensive Care Unit-1 (ICU 1). CPR is initiated and carried out by anaesthesiologists, attending physicians, nurses and respiratory therapists in the hospital. The Code Blue team, consisting of an anaesthesiologist, respiratory therapist and a nurse, responds to all cardiac arrests excluding those that occur in the operation theatres. The documentation of occurrence of in-hospital cardiac arrest, its causes and management was limited to individual patient case notes and was not easily available for analysis in our hospital prior to June 2009. The incidence of cardiac arrests was not known. Although the mortality rates were available, successful resuscitations largely went unregistered except in the patient’s case notes. National data regarding the incidence, causes, management and outcome of in-hospital cardiac arrest are also lacking. It is vital that baseline data in this regard is available to know the present quality of cardiopulmonary resuscitation with a special interest in outcome. Return of spontaneous circulation alone is not an indicator of successful resuscitation. Resuscitation can be deemed successful only if the victim survives to hospital discharge and returns to a reasonable quality of life.

Despite the dissemination of resuscitation training programmes, the quality of resuscitation performed in hospital is often suboptimal.¹ In the presence of an international recommendation by American Heart Association (AHA) on CPR, knowledge about the gaps in cardiopulmonary resuscitation provided in the Indian set
up with the standard recommendations will be helpful in improving the quality of CPR given in the Indian scenario.

Cardiac arrest in a hospital often follows a period of severe illness and if the pre-arrest scenario is recognised early, cardiac arrest may be averted or identified in time. This should be reflected by an improvement in the outcome. The modified early warning score (MEWS) is a useful tool for identifying hospitalised patients in need of a higher level of care and those at risk of in-hospital death. Use of the MEWS as a triage tool to identify patients needing hospital admission and those at increased risk of in-hospital death has been evaluated only to a limited extent. MEWS was not in practice in this hospital set up prior to December 2011.

Burch et al in their study concluded that the MEWS, specifically five selected parameters, may be used as a rapid, simple triage method to identify medical patients in need of hospital admission and those at increased risk of in-hospital death.$^2$