

# CPR revisited: the current scenario in Malta

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Back in 2016, an editorial in the MMJ presented an overview of cardiopulmonary resuscitation (CPR) in Europe, and highlighted that approximately one person suffers a cardiac arrest every 45 seconds, totalling 2-3,000 per day and 350,000 per annum<sup>1,2</sup>. The editorial confirmed that, in the majority of cases, cardiac arrest was fatal and <10% of victims of 'out-of-hospital' arrest survive to discharge from hospital.<sup>3</sup> Indeed, heart disease is the leading cause of death and tops 3.3 million per annum in developed countries,<sup>4</sup> with 50% of these patients suffering a sudden cardiac arrest. Most succumb at this stage but survival is often associated with significant neurological disability and an inferior quality of life compared with the pre-arrest state.<sup>5,6</sup> Prompt and effective CPR, especially if associated with timely defibrillation in adults, delivered within 1-2 minutes of a cardiac arrest, may improve the chances of survival 3-4 fold.<sup>3,6</sup> However, the 'time to intervention' is paramount and survival decreases by 10% for every minute delay in the initiation of CPR.<sup>7,8</sup> Conversely, prompt initiation of effective bystander CPR will more than triple survival.<sup>9</sup>

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## COVER PICTURE

### 'Kappella ta' San Mattew tal-Maqluba' - *Watercolour*

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The editorial reviewed the prevailing scenario in Malta in 2016-17, reporting that: “despite 71% of cardiac arrests being witnessed by laypersons, intervention only occurred in 39% of cases, including bystander defibrillation in 9% (data, Malta Resuscitation Council, MRC)”. It went on to state: “that the survival to discharge from hospital after out-of-hospital arrest in Malta was just 6% (data, MRC)”. Dismal statistics, indeed! But has the situation in Malta changed in 2024?

Since 2016, through the ongoing activities of the MRC, the Red Cross and several other training/educational bodies including the Health and Safety Department, Division of Education, numerous additional individuals have completed CPR training in Malta including doctors, nurses, paramedics and students, as well as teachers, laypersons, migrants, sportspersons and even children. Very recently, the exploits of the aptly named Fibrillu who successfully performs CPR on a collapsed individual has been highlighted in a specially illustrated book produced by the MRC and presented to the Division of Education to be distributed to schoolchildren.<sup>10</sup> Activities related to the European Resuscitation Council’s (ERC) ‘World Restart a Heart Day’ every October, ‘Kids Save Lives’<sup>11-15</sup>, and the ERC-UEFA (and MFA) jointly-sponsored ‘Get Trained Saves Lives/Goal campaign’<sup>16</sup> have been huge success stories. The emphasis of all these laudable initiatives has been on training laypersons and those more likely to witness a cardiac arrest, and have ensured that several hundred individuals have been recruited onto the ‘CPR trained/aware’ cohort of the population. The MRC estimates that this figure now exceeds 10,000 individuals in Malta and Gozo!

The success of CPR on unfortunate sports personalities who have suffered a cardiac arrest on live TV, has galvanised interest and awareness on the

importance of rapid, good CPR by bystanders. Reliance on the arrival of the emergency services when the average arrival time for an urgent ambulance is likely to exceed 10 minutes<sup>8</sup>, will inevitably incur unacceptable delays. The ever-increasing presence and availability of automated external defibrillators (AEDs) has ensured that laypersons can ‘crack on’, attach and activate an AED as soon as possible. Especially for adults in cardiac arrest where ‘shockable’ cardiac arrhythmias account for around 25-33% of cases,<sup>17</sup> this intervention is probably the single most important determinant for survival. In this regard, in Malta an AED-locator mobile phone App has existed for several years but, disappointingly, remains undersubscribed with too few AEDs being registered and, therefore, made available for use in the event of an arrest. The installation of AEDs in ALL public buildings, recreational spaces, and any venue where a significant number of individuals congregate (e.g. schools, churches, cinemas, etc., etc.), should be mandatory. Indeed any building application for such an establishment MUST be subject to the installation of an adequate number of AEDs pending approval. Likewise CPR training for staff in any large institution should also be mandatory, with designated staff members/departments trained and empowered to ensure its implementation.

Undoubtedly over the past two decades, the general awareness as well as formal training on CPR has increased substantially in Malta. Nevertheless there is still room for improvement, particularly with regard to coverage and availability of AEDs. For all those many individuals who are destined to suffer a cardiac arrest, the likelihood of survival is significantly linked to timely and effective CPR and, for them, trained individuals and easy access to an AED are absolutely paramount.

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