

## Resuscitation Portrayal in Philately

Chandrasekhar Krishna Murti<sup>†</sup><sup>†</sup>Correspondence email: globeshaker@gmail.com**Abstract**

The word *philately* is the English translation of the French *philatélie*, coined by Georges Herpin in 1864 from the Greek root word *phil(o)-*, meaning 'an attraction or affinity for something', and *ateleia*, meaning 'exempt from duties and taxes'. Thematic or topical philately is a branch of stamp collecting that favours a theme over the generic. It requires an in-depth knowledge of the core nature of the collection that includes mint and cancelled/postmarked stamps, first day covers, maximum cards, miniature sheets, cancellations and Cinderella labels. Philatelic material can form a useful means of dissipating knowledge to the lay public. Cardiopulmonary resuscitation (CPR) is a vital, lifesaving skill that every citizen must learn to be able to revive victims of sudden cardiac arrest outside a hospital location. This is because delays of minutes will make a difference between life, vegetative state, and death. This unique collection explores the issue of philatelic material the world over specifically related to CPR.

**Key Points**

- Teaching CPR skills to the general public
- Using vivid images in philatelic materials to educate public
- Target large public audience to create awareness on CPR

**Key words:** cardiopulmonary resuscitation (CPR), philately, postage stamps, first day covers

**INTRODUCTION**

The collection is depicted in sections under the headings of Cardiopulmonary Resuscitation, Compression-Only Life Support, Rescue Breathing, Defibrillation, and Pacing. All these sections are amplified by philatelic materials from the author's own personal collection.

**CARDIOPULMONARY RESUSCITATION**

On the 100th Anniversary of St John Ambulance on 22 May, 2008, POS Malaysia and Bank Negara Malaysia issued a special commemorative cover with a set of 3 multicoloured stamps on first aid (Figure 1). The stamp with a face value of one Malaysian ringgit depicts emergency medical technicians (EMTs) administering cardiopulmonary resuscitation (CPR) to an accident victim in cardiac arrest (Figure 1). The first day cover (FDC) and all three stamps depict the centenary logo. The cancellation portrays the official emblem of the Malaysian St John Ambulance.<sup>1</sup>

The British Virgin Islands (BVI) are in the Caribbean and comprise the main islands of Tortola, Virgin Gorda, Anegada, and Jost Van Dyke, along with more

than 50 other smaller islands and cays, 16 of which are uninhabited.

On 26 September, 1988, as a commemoration of the 125th anniversary of the International Red Cross Society, the island nation issued two sets of stamps; the first to highlight precautions for swimmers and water athletes and the second on first aid measures for drowning victims (Figure 2). The latter set of 4 stamps, all of \$0.50 face value, depict various aspects of CPR like checking response by tapping the victim's shoulders, head-tilt/chin-lift manoeuvre to ensure a patent air passage, technique of mouth-to-mouth expired air ventilation to ensure oxygenation, and external chest compressions to maintain circulation and restart the heart.<sup>2</sup>

On 5 November, 2010, France issued a FDC and a block of stamps on the 150th anniversary of the French Red Cross. This was themed on lifesaving gestures (actions) in medical emergencies such as choking and sudden cardiac arrest (SCA; Figure 3). The lot was designed by Aurelie Baras with a face

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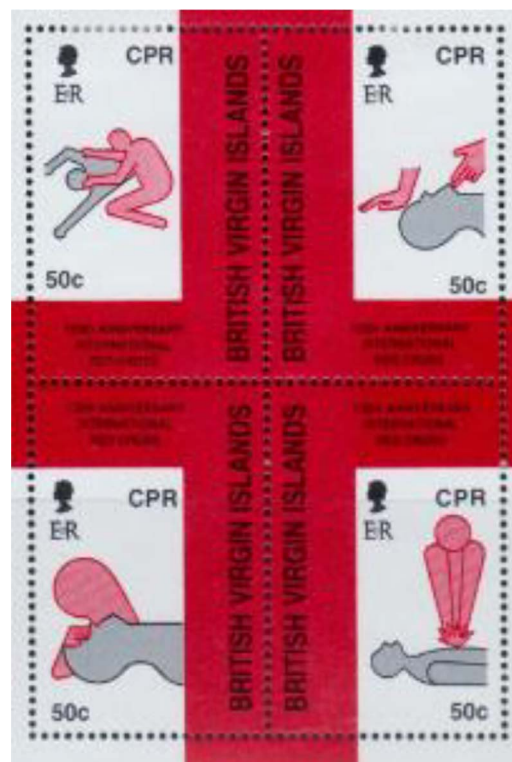
**Figure 1** – Malaysian first day cover (FDC) and stamp depicting cardiopulmonary resuscitation (CPR) by emergency medical technician (EMT)

value of €0.58. The first stamp portrays calling for help and alerting the emergency medical response system and automated external defibrillator (AED) to the location of the event. The second stamp depicts positioning of the unconscious victim in the recovery position and assessing condition with respect to response, breathing, and pulse. The third stamp depicts a victim of choking clutching his throat in a classical manner and the rescuer grabbing the victim from behind and administering abdominal thrusts to expel the foreign body lodged in the lower airway. The fourth stamp depicts a rescuer administering high-quality external chest compressions on a victim of SCA.<sup>3</sup>

The Republic of China commemorated the 80th anniversary of the Red Cross in 1984 with a postage stamp depicting various nursing activities including two-rescuer CPR for a victim of drowning (Figure 4).

### COMPRESSION-ONLY LIFE SUPPORT

The Indian Society of Anaesthesiologists initiated the Indian Resuscitation Council (IRC) in 1977. The very next year, the International Liaison Committee on Resuscitation (ILCOR) launched the first global initiative on cardiac arrest with the slogan of ‘All citizens of the world can save a life’. Since then, each 16th of October (celebrated as World Anaesthesia Day) is now also designated as the annual World Restart a Heart Day. The aim is to raise public awareness on achieving competency in CPR. On 16 October, 2020, a special FDC was issued at IRC Headquarters at Kakinada, Andhra Pradesh, depicting the logo of the IRC and the image of a provider administering chest compression-only life support (COLS) to a victim of SCA (Figure 5). High-quality chest compressions alone have been found to be as effective as conventional CPR in SCA.<sup>4</sup> The cover image highlights the correct stance of the rescuer/provider applying a downward force of the full torso cued by red lines emphasizing rocking motion from the hips, elbows kept straight with both hands locked, and pressing on the lower sternum of the victim. The cancellation also depicts an identical image in black and white.



**Figure 2** – British Virgin Islands stamps on cardiopulmonary resuscitation (CPR)

The Duke of Edinburgh Award Service conducts a 2-day comprehensive first aid course and awards a Level 3 (Qualsafe) Outdoor First Aid Certificate, fully compliant with The Health and Safety (First-Aid) Regulations 1981, valid for 3 years. A maximum card (postage stamp with matching image on the cover and postmark related to the image) was issued in 1981 on the 25th anniversary of the organization.<sup>5</sup> Designed by Philip Sharland, the maxicard displays the logo of the organization together with an image of a young lady kneeling beside a victim of SCA and administering high-quality chest compressions. The victim’s face is upturned to ensure airway patency. The mint stamp with a face value of 22 pence carries a replica of that depicted on the cover (Figure 6).

A nationwide citizen CPR campaign was organised in Belgium by the Belgian Heart Association, the Belgian Red Cross, and the Belgian Society for Intensive Care. The slogan was ‘three minutes for a life’. The objective of the program was to instruct at least 100 000 adult citizens over a two-year period in the correct technique of adult CPR.<sup>6</sup> The Belgium Postal Department and the Red Cross issued a special postcard with a simple and striking schematic depiction of a rescuer performing chest compressions on a victim of SCA, emphasising that the drill must commence within three minutes of an event for a better outcome. The stamp postmark/cancellation has the same logo with date of issue (Figure 7).

A commemorative stamp was issued on the Centenary of Hong Kong St John Ambulance Brigade on 14 April, 2016.<sup>7</sup> Designed by



Figure 3 – French Red Cross first day cover (FDC) and stamps on lifesaving actions



Figure 4 – Two-rescuer cardiopulmonary resuscitation (CPR) for a victim of drowning

Ms. Tsoi Ka-ching, the stamp shows a brigade EMT administering high-quality chest compressions for a victim of SCA during an athletic event (Figure 8).

### RESCUE BREATHING

Dutch hospitals follow the European Resuscitation Council guidelines under the supervision of the Dutch Association of Resuscitation Team Coordinators. Rapid response teams are tasked with preventing or responding to serious adverse events.<sup>8,9</sup> In 1993, a special FDC was released depicting a rescuer maintaining a chin lift in a victim of SCA and administering expired air ventilation

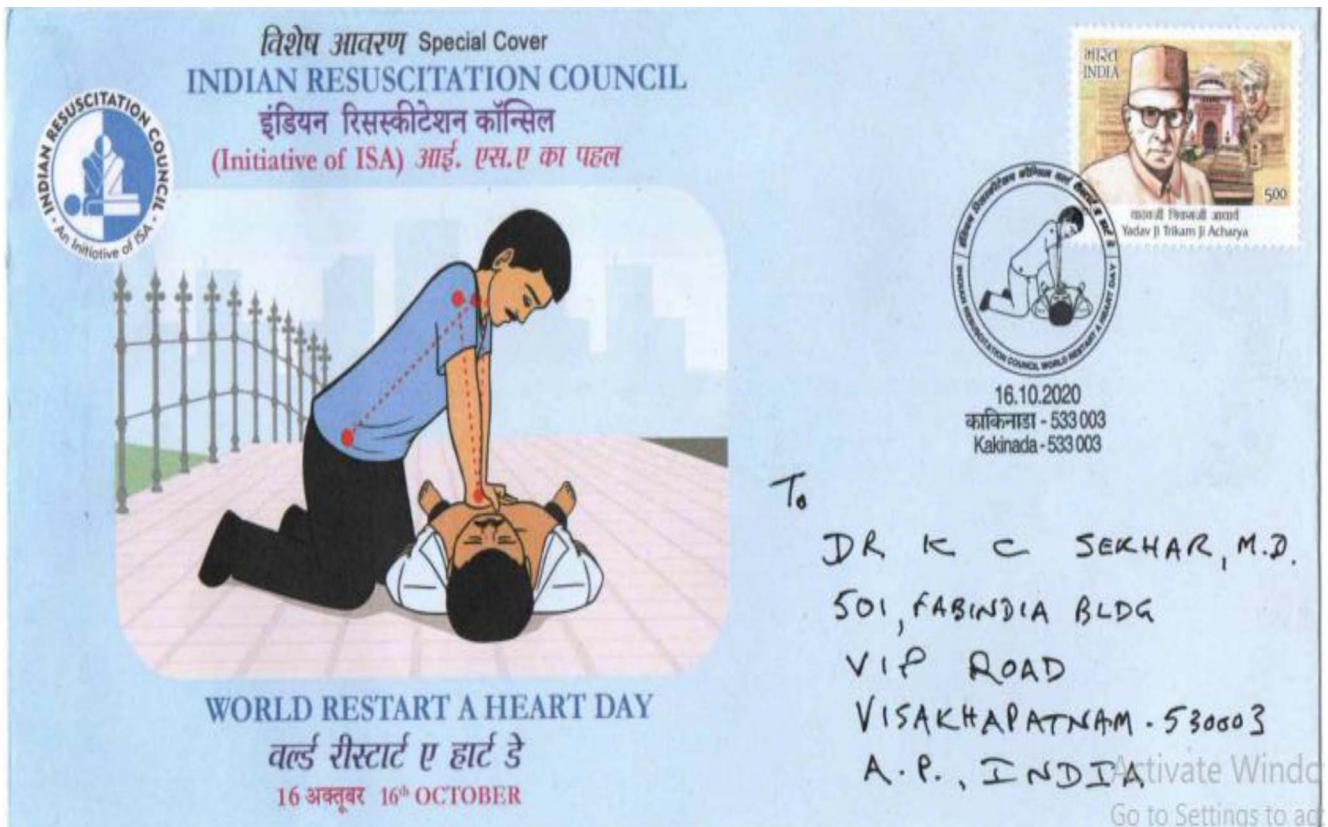


Figure 5 – Indian Resuscitation Council (IRC) special cover on compression-only life support (COLS)



Figure 6 – Chest compressions in sudden cardiac arrest



Figure 7 – Belgian '3 minutes for a life' first day cover (FDC) on chest compressions in sudden cardiac arrest (SCA)



**Figure 8** – Emergency medical technician (EMT) administering chest compressions in sudden cardiac arrest (SCA)

using a pharyngeal airway and a barrier sheet to prevent contamination (Figure 9). The technique was pioneered in 1956 by Dr Peter Safar (1924–2003) after observing that expired air containing 16% oxygen was more than adequate to meet the body’s requirement of oxygen and correct the severe hypoxia following SCA. Two breaths, each over 1 second duration, must produce a visible chest rise in the victim, followed by 30 chest compressions to restart the heart.

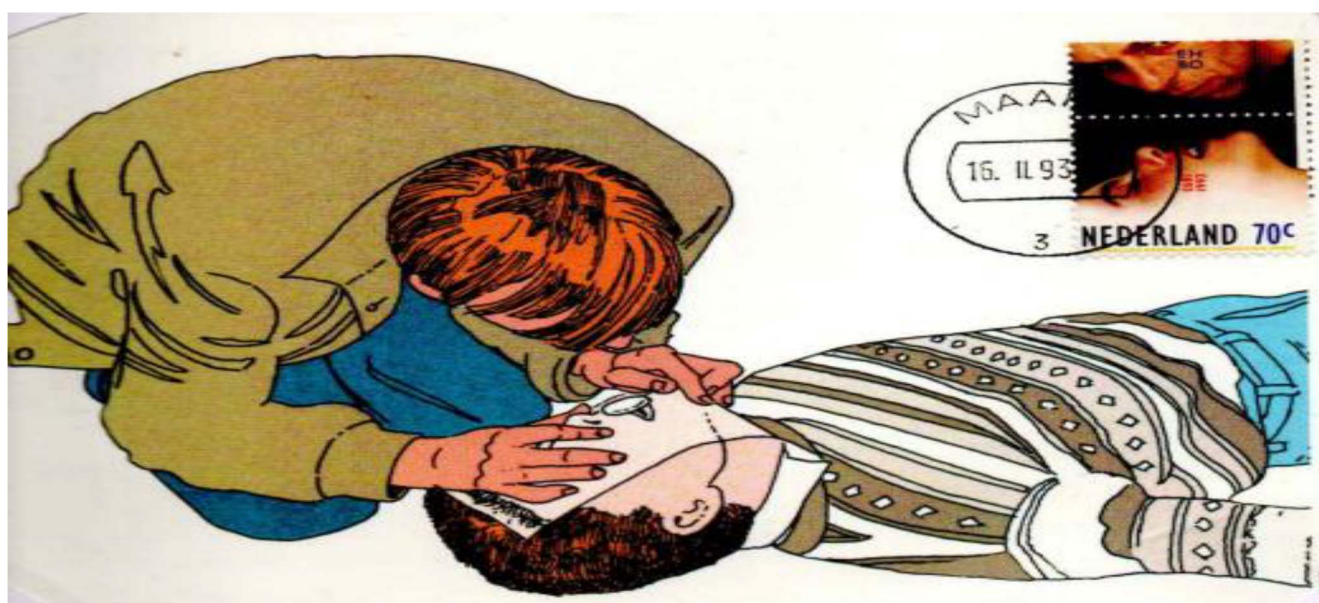
The 1993 Netherlands postage stamp issued on the health care theme by Frans Osterhof depicts a rescuer assessing an unconscious victim for respiration prior to administering mouth-to-mouth respiration.<sup>3</sup>

Situated in the western Pacific Ocean, the Gilbert and Ellice island nations were a part of the British Empire from 1892 to 1976, a protectorate from 1892 to 12 January, 1916. In October 1975, these islands were divided into two separate colonies, and they became independent nations shortly thereafter. Later, the Ellice Islands became Tuvalu in 1978, and the Gilbert Islands became part of Kiribati in 1979. In 2014, the government bought 20 square kilometres of land on the Fijian island of Vanua Levu that could serve as a new homeland after climate change submerged the islands.<sup>10</sup>

On the 100th anniversary of the British Red Cross on 9 March, 1970, the island nation issued a FDC and three multicoloured commemorative postage stamps of face value 10, 15, and 35 cents. Designed by L Arbell, the set depicts a rescuer performing a head-tilt/chin-lift manoeuvre and providing rescue breaths for a victim of SCA (Figure 10).

On 7 May, 1966, Finland released a multicoloured postage stamp designed by Olavi Vepsäläinen. With a face value of 0.15 + 0.03 Finnish markka, the stamp depicts a rescuer administering mouth-to-mouth respiration to a victim of cardiac arrest beside a highway.<sup>3</sup> He is seen maintaining a chin lift with one hand and pinching the victim’s nostrils with the other while forcefully breathing into the victim’s mouth to observe chest rise (Figure 11).

The Republic of North Macedonia is a landlocked country in Southeast Europe. It shares land borders with Kosovo to the northwest, Serbia to the north, Bulgaria to the east, Greece to the south, and Albania to the west.



**Figure 9** – Netherlands first day cover (FDC) on rescue breathing



**Figure 10** – Gilbert (Kingsmill) and Ellice Islands first day cover (FDC) on rescue breathing

This 2017 Macedonian souvenir card depicts a nurse administering mouth to mouth and nose respiration to an infant together with head tilt using one hand and chest compressions with the other (Figure 12).

### SKILLS LAB CPR TRAINING

Mandatory simulation and artificial intelligence-based training is essential to improve resuscitation skills. The ILCOR, IRC Federation, American Heart Association, and European Resuscitation Council all

have published guidelines on resuscitation training. The optimal duration of instructor/provider-led basic cardiopulmonary life support and AED training, spaced booster sessions, and updates to prevent skills decay and debriefing sessions after real resuscitation events must be adhered to.<sup>11</sup>

The Isle of Man is a self-governing British Crown Dependency in the Irish Sea between Great Britain and Ireland. On 16 October, 1989, the island nation issued a set of five stamps to commemorate the 125th anniversary of the International Red Cross and Red Crescent. Designed by Anthony D Theobald, the multicoloured stamp with a face value of 14 pence depicts three Red Cross cadets learning the correct technique of external chest compressions on a mannikin (Figures 13 and 14). The same issue also commemorates the Centenary of Nobles Hospital located in Isle of Man.<sup>12</sup>

On 9 May, 1988, Tuvalu issued a stamp commemorating the 125th anniversary of the International Red Cross Society.<sup>13</sup> Designed by Michael Pollard, the stamp with a face value of 60 Tuvaluan cents, depicts nurses performing chest compressions on a manikin in the skills lab (Figure 15).

Nevis in the Caribbean Sea forms part of the inner arc of the Leeward Islands chain of the West Indies. Nevis and the neighbouring island of Saint Kitts constitute the Federation of Saint Kitts and Nevis, a singular nation state.<sup>14</sup>

The island nation issued a multicoloured stamp designed by Leslie Curtis with a face value of 40 East Caribbean cents on 20 June, 1988, to commemorate the 125th anniversary of the International Red Cross (Figure 16). The stamp depicts a first aid instructor demonstrating the chin-lift/head-tilt manoeuvre on a volunteer to maintain a patent airway in an unconscious patient.<sup>15</sup>



**Figure 11** – Finland stamp on rescue breathing



Figure 12 – A special Macedonian cover on infant cardiopulmonary resuscitation (CPR)

Fiji issued a stamp on 25 November, 2011, designed by Sharon Light with a face value of 40 Fijian cents, commemorating the St John Ambulance services and volunteering for health and safety as part of their series on International Year of Volunteers (Figure 17). The stamp depicts a certified trainer instructing a volunteer on the correct technique of chest compressions to revive a victim of SCA.<sup>15</sup>

#### FIRST AID IN CHOKING

Choking or foreign body airway obstruction occurs when an object partially or completely obstructs the passage of air exchange between the upper airway and the trachea. Choking is the fourth leading cause of unintentional death, the leading cause of infantile death, and the fourth leading cause of death among preschool



Figure 13 – Isle of Man special cover and stamp on cardiopulmonary resuscitation (CPR) training



**Figure 14** – Isle of Man special cover and stamp on cardiopulmonary resuscitation (CPR) training

children. Infants (children less than one year) with foreign body aspiration should be treated with alternating five back blows followed by five chest thrusts. Conscious adults are given abdominal thrusts (the Heimlich manoeuvre) with a clenched fist placed at the level of the umbilicus and an upward thrust delivered posteriorly and superiorly. Unconscious pulseless individuals are given CPR with the attempt to remove obvious foreign bodies before administering rescue breaths.<sup>16</sup>

Uganda issued a block of 4 stamps on 19 October, 1990, on behalf of the World Health Organization on the theme of health and safety. The stamp with a face value of 90 Ugandan shillings depicts Mickey Mouse saving Donald Duck from choking by applying an upper abdominal thrust (the Heimlich manoeuvre) and succeeding in expelling a foreign body lodged in its lower airway (Figures 18 and 19).

Figure 20 includes one of a set of stamps from France shown earlier as Figure 3, which depicts a victim of complete choking clutching at his neck in a classical sign of inability to breathe with a rescuer applying upper abdominal thrusts from behind to relieve the obstruction.

### EXTERNAL CARDIAC DEFIBRILLATION

With the availability of public access AEDs, early defibrillation for ventricular fibrillation (VF)/pulseless ventricular tachycardia (pVT) soon after initiation of high-quality CPR has yielded high rates (80% if given within one minute of arrest) of success. These devices are compact and user-friendly. Once powered on, they have voice and visual prompts guiding the user to attach the earmarked adhesive electrode pads to the chest of a victim of SCA and automatically analyse the patient's cardiac rhythm to detect VF and pVT with a sensitivity of >95% and a specificity of 95%. It then



**Figure 15** – Cardiopulmonary resuscitation (CPR) training for nurses



**Figure 16** – Airway management training in a unconscious patient

delivers a biphasic shock either automatically or by instructing the rescuer to press a button.<sup>17</sup>

On 3 June, 2015, a large training session for 60 volunteers was conducted on the use of AED at the Piazza San Carlo in Turin, Italy.<sup>16</sup> The special cover issued to commemorate the event depicts a victim of SCA lying supine on the floor with electrode pads placed on his chest and a rescuer announcing 'All Clear' caution before pressing the shock button on the AED administering the shock (Figure 21). The round cancellation translates as 'Project Vita Ragazzi' promoting heart and resuscitation health awareness and education. AED-delivered DC shock within 1 minute of SCA can save 87% of victims.

In 1968, on the 20th anniversary of the World Health Organisation, the postal department of Somalia issued a set of commemorative stamps.<sup>19</sup> The stamp with a face value of 1.80 Somali shillings, depicts an intensive care nurse applying paddles on the bare chest of a victim of SCA, preparatory to administering a DC shock (Figure 22).

### EMERGENCY CARDIAC PACING

All cardiac pacemakers are generally composed of a pulse generator that generates the electrical current required for stimulation of heart musculature and one or two electrodes (also referred to as leads), which are responsible for transmitting the electrical activity generated by the pulse generator to the heart musculature. Placement of a temporary transvenous pacemaker is a potentially lifesaving procedure that can be performed in the setting of unstable bradyarrhythmias or tachyarrhythmias. Temporary transvenous pacing uses central venous



**Figure 17** – Training in chest compressions in skills lab



Figure 18 – A Ugandan first day cover (FDC) with series of stamps portraying the Heimlich manoeuvre for choking



Figure 19 – A Ugandan first day cover (FDC) - Mickey Mouse saving Donald Duck from choking by the Heimlich manoeuvre, succeeding in expelling a foreign body lodged in its lower airway



Figure 20 – A Ugandan first day cover (FDC) with stamp portraying the Heimlich manoeuvre on a man



**Figure 21** – External cardiac defibrillation for a victim of sudden cardiac arrest with an automated external defibrillator (AED)

access to pass an electrode into the right ventricle. Permanent pacemakers are placed under the skin of the chest wall with epicardial leads or leadless, single chamber, dual chamber, or biventricular types.<sup>20</sup>

On 18 February, 2020, Australia issued a series of stamps on life-changing medical innovations that have benefited from Australian capability. One stamp with a face value of 1.10 Australian dollars designed by Nigel Buchanan depicts a transvenous emergency pacemaker inserted from the right femoral vein into the right ventricle (Figure 23). Invented by Sydney-based physician anaesthetist Dr Mark Lidwill MD (1878–1968) with physicist Edgar H Booth (1893–1963) in 1926, the device underwent successful clinical trials in 1929. The inventors did not patent the invention, however, and American Dr Albert Hyman built and patented his cardiac pacemaker in New York in 1932.<sup>21</sup>

The VIIth World Symposium on pacemakers was held from 1 to 5 May, 1983, in Vienna.<sup>22</sup> The Postal Department of Austria released a first cover to commemorate the conference, depicting a chest x ray

in which an implanted pacemaker and its lead wire can be viewed. The special stamp issued shows the captured pacing impulse trace over a schematic heart image, restoring the patient with cardiac dysrhythmias to good health and an active life (Figure 24).

On 17 August, 2011, the Canada Post released a series of stamps on Canadian innovations designed by Danielle Trotter. It included a



**Figure 22** – Defibrillation by intensive care unit (ICU) nursing staff



**Figure 23** – Transvenous pacing leadwire in right ventricle



**Figure 24** – Implanted permanent pacemaker device, pacemaker trace, and good health

stamp with a face value of 59 Canadian cents, depicting a cardiac monitor with an incorporated pacing cable invented by a Canadian electrical engineer John Hopps while studying the effects of hypothermia in 1950 (Figure 25).

### IMPLANTABLE CONVERTER DEFIBRILLATORS

Implantable converter defibrillators (ICDs) are management standard for use in primary prevention (the prevention of a first life-

threatening event) and secondary prevention (prevention of a recurrence of a potentially fatal arrhythmia or cardiac arrest) in patients with coronary heart disease. It comprises a pulse generator and 1 or more leads for pacing and defibrillation electrodes that can perform antitachycardia pacing and deliver low-energy DC shocks.<sup>23</sup>

The government of Israel issued a special postal cover and set of stamps on 2 April, 2013, commemorating Israeli achievements in cardiology. The stamp with a five-new shekel face value depicts an ICD, a small battery-powered device placed under the skin over the patient's chest with leads for sensing and pacing (Figure 26). The device continuously checks the heartbeat and delivers electric shocks and pacing, if needed, to restore a regular heart rhythm.<sup>24</sup>



**Figure 25** – A first-generation cardiac pacemaker



**Figure 26** – The implantable converter defibrillator device

## SUMMARY

Philately forms an important and powerful media through which one can dissipate awareness to the lay public. Since SCA is a public health issue, releases of special covers and stamps create a significant impact in educating the masses on various aspects of lifesaving. Money realised through sales of these materials can also fund skills labs, workshops, and AEDs to help save lives through prompt CPR by the lay public and first responders.

## REFERENCES

1. Krishnamurti C. A Philatelic portrayal of resuscitation techniques and interventions. *Journal of Resuscitation*. 2025;**2**(1):19-27.
2. Krishnamurti C. A Philatelic depiction of cardiopulmonary resuscitation. *Med Res Arch*. 2024;**12**(4):1-14.
3. The Red Cross and Philately, Geneva 1965. The League of Red Cross Societies, Geneva.
4. Ahmed SM, Garg R, Divatia J, et al. Compression-only life support (COLS) for cardiopulmonary resuscitation by layperson outside the hospital. *Indian J Anaesth*. 2017;**61**(11):867.
5. CollectGBStamps.Co.uk
6. Bossaert L. Teaching citizen-CPR: a Belgian experience. *Update Intensive Care Emerg Med*. 1988;**5**:455-461.
7. Touchstamps.com.
8. Schlupe M, van Limpt GJC, Stolker RJ, Hoeks SE, Endeman H. Cardiopulmonary resuscitation practices in the Netherlands: results from a nationwide survey. *BMC Health Serv Res*. 2019;**19**(1):333.
9. Rozen T, Butt W. Rapid response teams: how are they best used? *Crit Care*. 2016;**19**:253. doi:10.1186/s13054-016-1425-z
10. Paxton, J. Gilbert and Ellice Islands Colony. In: Paxton J, ed. *The Statesman's Year-Book*. London, England: Palgrave Macmillan; 1972.
11. Lauridsen KG, Løfgren B, Brogaard L, et al. Cardiopulmonary resuscitation training for healthcare professionals: a scoping review. *Simulation in Healthcare*. 2022;**17**(3): 170-182.
12. Colnect and stampdata. Stamps on the 125th anniversary of the Red Cross-Centenary Noble's hospital. Isle of Man Oct 1989. www.Stampdigest.com.
13. Colnect Tuvalu. Tuvalu postage stamps anniversary of the International Red Cross 1988 stamp catalogue. www.stampworld.com.
14. Nevis, St. Kitts stamps issued on the 125th anniversary of the International Red Cross- First Aid Training. www.Colnect.com.
15. Fiji stamps 2011. International year of volunteers- Volunteering for health and safety. Anniversary of the St John's ambulance. www.Colnect.com.
16. Duckett SA, Bartman M, Roten RA. *Choking*. Treasure Island, FL: StatPearls Publishing; 2023.
17. Brooks SC, Clegg GR, Bray J, et al. Optimizing outcomes after out-of-hospital cardiac arrest with innovative approaches to public-access defibrillation: a scientific statement from the International Liaison Committee on Resuscitation. *Circulation*. 2022;**145**:e776-8-1.
18. Simini B. Early defibrillation by first responders trialled in Italy. *Lancet*. 1999;**353**(9167):1864.
19. Stampworld Somalia 3/21.
20. Verma N, Knight BP. Update in Cardiac Pacing. *Arrhythm Electrophysiol Rev*. 2019;**8**(3):228-233.
21. Mellor L. *150 Years, 150 Firsts: The People of the Faculty of Medicine*. Sydney, Australia: Sydney University Press; 2006.
22. The abstracts of the VIth World Symposium on Cardiac Pacing. Vienna, Austria, May 1-5, 1983. *Pacing Clin Electrophysiol*. 1983;**6**: A1-172.
23. DiMarco JP. Implantable cardioverter-defibrillators. *N Eng J Med*. 2003;**349**: 1836-1847.
24. Collecting stamps: Israel Achievements Cardiology 3v. 2013; www.PostBeeld.com.