

**“Resuscitation Academy (RA) 10-Step
Implementations in the PAROS Group”
– Update from Aga Khan University,
Karachi, Pakistan**

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Disclosure

- Senior Instructor, Department of Emergency Medicine, The Aga Khan University Hospital, Karachi, Pakistan
- Travel funding from Singapore Clinical Research Institute (SCRI)

Team

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Karachi



Introduction

- Largest city of Pakistan
- Population > 15 Million
- No government owned EMS & first responder system

- Ambulance services are provided by private non-profit organizations.
- Private transport as another mode of transfer of patients

- According to a survey done in 2009 drivers from two privately run charity-based ambulance services had no paramedic training.
- Ambulances were equipped only with a stretcher and an oxygen cylinder with no resuscitation measures available.

Project Timeline

- Two years from July 27th 2017 - July 27th 2019

Deliverables

1. Establish a cardiac arrest registry (n=500)
2. Begin Telephone-CPR with ongoing training and QI.
3. Number of lay people and EMS dispatchers to be trained in CPR over the study period.
(n=550)
4. Use smart technologies to extend CPR and public access defibrillation. Programs to notify volunteer bystanders who can respond to nearby arrest to provide early CPR and defibrillation.

1. Cardiac Registry (500)

- In phase 1 we enrolled **514 cases** in 14 months from following 4 hospitals of Karachi, Pakistan:

1. Karachi Institute of Heart Disease (KIHD) = 40
2. Jinnah Postgraduate Medical Centre (JPMC) = 264
3. Tabba Institute of Heart Disease (THD) = 89
4. Aga Khan University Hospital (AKUH) = 121

1. Cardiac Registry (500)

Cont

- In phase 2, we have started registry in 5 hospitals of Karachi Pakistan and have enrolled 220 case till date.
- Name of hospitals are as follows
 1. Patel Hospital (Private hospital with 13 beds in ER) = 18
 2. Karachi Institute of heart disease (KIHD) (public hospital with 22beds in ER) = 50
 3. National institute of cardiovascular disease (NICVD) (public hospital with 51 beds in ER) = 148
 4. Darul Sehat Hospital (Private Hospital with 18 beds in ER) = 04 (started last month)
 5. Chiniot Hospital (Private Hospital with 15 beds in ER) = 02 (started this month)

KIHD



Patel Hospital



Chiniot Hospital



NICVD



Darul Sehat Hospital



2. Begin Telephone-CPR with ongoing training and QI.

- Aman Ambulance from Karachi Pakistan has system of telephone CPR.
- Train other Emergency Dispatchers in collaboration with the Aman Ambulance

3. Number of lay people and EMS dispatchers to be trained in CPR over the study period. (n=550)

- We have developed training material after IRB approval.
- Formation of “**Cardiac Arrest Resuscitation Interest Group**” (CARInG) in which we have invited different organizations from Karachi who are working on CPR trainings such as
 - FRIP
 - HOPES
 - Humanity initiatives
 - Saving 9
 - Aman Foundation



3. Number of lay people and EMS dispatchers to be trained in CPR over the study period. (n=550) Cont...

- We developed a pre-post test tool for KAP survey in order to evaluate trainings.
- We have done pilot of KAP survey and amended tool accordingly.
- Tool has also translated into local language for better understanding.
- Consent will be taken from all participants before the start of the survey.
- We have trained 13 master trainers from the “CARInG” members.

KAP Survey Tool



Knowledge Tool

Providing knowledge and skills of compressions only CPR (cardio pulmonary resuscitation) to laymen in Karachi, Pakistan-A quasi experimental study

Pre-Test

Study Id

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Knowledge Assessment Questions: Circle correct answers

1. What do you think “Cardiopulmonary resuscitation (CPR)” means?

a) To apply strong compression to the chest at certain intervals

b) To compress the heart by directly opening the chest wall.

c) I have no idea

1. آپ کے خیال میں CPR کا کیا مطلب ہے؟

(a) سینے کو ایک مخصوص وقفہ پر زور سے دبانے

(b) سینے کو کھول کر دل کا ڈائریکٹ مساج کرنا

(c) مجھے نہیں معلوم

2. Which of the following may be a sign of sudden heart arrest? (You can mark more than one option)

a) Loss of consciousness

b) No breathing/ Abnormal breathing

c) No Pulse

d) A person sitting or standing suddenly collapsed

e) Chest pain

f) The individual is not moving

2. ان میں سے کونسی علامت اچانک دل بند ہونے کو علامت ہیں؟ (ایک سے زیادہ منتخب کر سکتے ہیں)

(a) بیہوشی

(b) سانس کا نہ آنا یا رک رک کر آنا

(c) نبض کا نہ چلنا

(d) کسی شخص کا اچانک سے گر جانا

(e) سینے کا درد

(f) جب مریض حرکت کرنا چھوڑے

Train the Trainers



Train the Trainers



The Pilot Project



4. Use smart technologies to extend CPR and public access defibrillation. programs to notify volunteer bystanders who can respond to nearby arrest to provide early CPR and defibrillation.

- We have contacted different stakeholders.
- Expecting to develop mobile app till the end of the year.

Thank you!