



# COLLABORATION FOR COVID & GLOBAL HEALTH RELATED GRANT

GAYATHRI DEVI NADARAJAN

# NIHR GRANT APPLICATION

- New cross UK government funding call aiming to support applied health research that will address COVID-19 knowledge gaps. The focus is on understanding the pandemic and mitigating its health impacts in low and middle-income countries (LMIC) contexts. The call prioritises epidemiology, clinical management, infection control and health system responses.
- <https://www.nihr.ac.uk/documents/global-effort-on-covid-19-geco-health-research-call-specification/24832#Eligibility>
- A few points to note:
  - the PI must be from an LMIC (could be with Higher Education Institutions and not-for-profit research institutions)
  - Proposals should normally be up to £1m per award. The size of grants will vary according to the needs of each research project and will need to provide a robust case for value for money.
  - Application deadlines: (12 midday BST) **10<sup>th</sup> August 2020** Or (12 midday BST) **28<sup>th</sup> September 2020**

# THEMES FOR THE GRANT

- Epidemiological studies
- Clinical management
- Infection prevention and control including health care workers' protection
- Social Sciences and Humanities in the Outbreak Response

# STUDY 1: PSYCHOLOGICAL WELLNESS AMONGST ASIAN EMERGENCY HEALTHCARE STAFF DURING COVID-19

- Cross sectional survey across Asia
- Online platform
- Mainly quantitative
- Qualitative component can be country/ context specific
- Across domains of burnout, depression, PTSD, resilience
  
- Collaborate with PI from a LMIC

# **STUDY 2: CROSS SECTIONAL SURVEY ON PRE-HOSPITAL SYSTEM BEFORE AND DURING COVID- TO DEVELOP A PRE-HOSPITAL PREPAREDNESS GUIDELINE FOR PANDEMIC**

- Survey being conducted currently
- For medical directors
- Via online platform
- KIV grant application to support analysis of results, KIV webinar to develop best practice guidelines

**INTERESTED???**

Contact:

[gayathri.devi.nadarajan@singhealth.com.sg](mailto:gayathri.devi.nadarajan@singhealth.com.sg)

# UPDATE ON GRA 10 STEPS - NEXT 3 YRS

- Applying to Laerdal Foundation for grant to develop Pre-hospital system assessment toolkit for CVS related time sensitive emergencies
- 1) Explore potential elements of assessment for developing PEC systems in Southeast (SE) Asia**  
*Overview:* Through PAROS, conduct a mixed-methods online survey of representative stakeholders in developing PECs within SE Asia (n=250). Informed by these findings, we will conduct in-depth phone interviews with key stakeholders and use content analysis (n=50) to identify a short list of elements for additional assessment in Aim 2. These elements will cover the domains of cardiovascular, trauma and perinatal emergencies.
  - 2) Determine 10 key elements specific to cardiovascular, trauma and perinatal emergencies for developing PEC systems.**  
*Overview:* Using a modified Delphi technique conducted through a virtual one day consensus meeting, we will partner with key stakeholders and international experts to inform modification of the GRA 10-steps program and integration of other PEC elements identified above to develop a broader developing PEC system assessment tool encompassing cardiovascular, traumatic, and perinatal emergencies.
  - 3) Pilot a systems assessment tool for developing PECs in selected SE Asian countries.**  
*Overview:* Develop a novel systems assessment tool to pilot in developing PEC systems. We will partner with 3 EMS agencies in low-resource settings in SE Asia and provide a test tool for piloting and iterative feedback over a one-year period. Outcome measures will include acceptability, self-efficacy, usability, and change in measurements specific to cardiovascular, traumatic, and perinatal emergencies.

# OHCA in times of COVID-19

Dr Shir Lynn Lim  
Consultant Cardiologist  
NUHCS, Singapore





# Background

- The global situation of COVID-19:
  - First reported in Wuhan in December 2019
  - Declared pandemic by WHO on 11 March 2020
  - As of 10 August, 18.7m infections and 706k deaths in 213 countries
- Direct and indirect consequences of the pandemic, secondary to measures taken to contain the disease
- OHCA could be a valuable surrogate for population health, efficacy of the healthcare system and health-providing behavior during the pandemic

- **Aims:**

1. To compare the incidence and characteristics of OHCA between COVID and non-COVID periods
2. To compare the pre-hospital care (health-provision behaviour) between COVID and non-COVID periods
3. To compare the outcomes of OHCA between COVID and non-COVID periods

- **Hypotheses:**

1. There is a change in the incidence and characteristics of OHCA during the COVID period
2. Health provision may be adversely affected during the COVID period, manifesting in longer EMS response times and lower rates of community interventions.
3. Worse OHCA outcomes may be seen during the COVID period, as a result of (1) and (2)

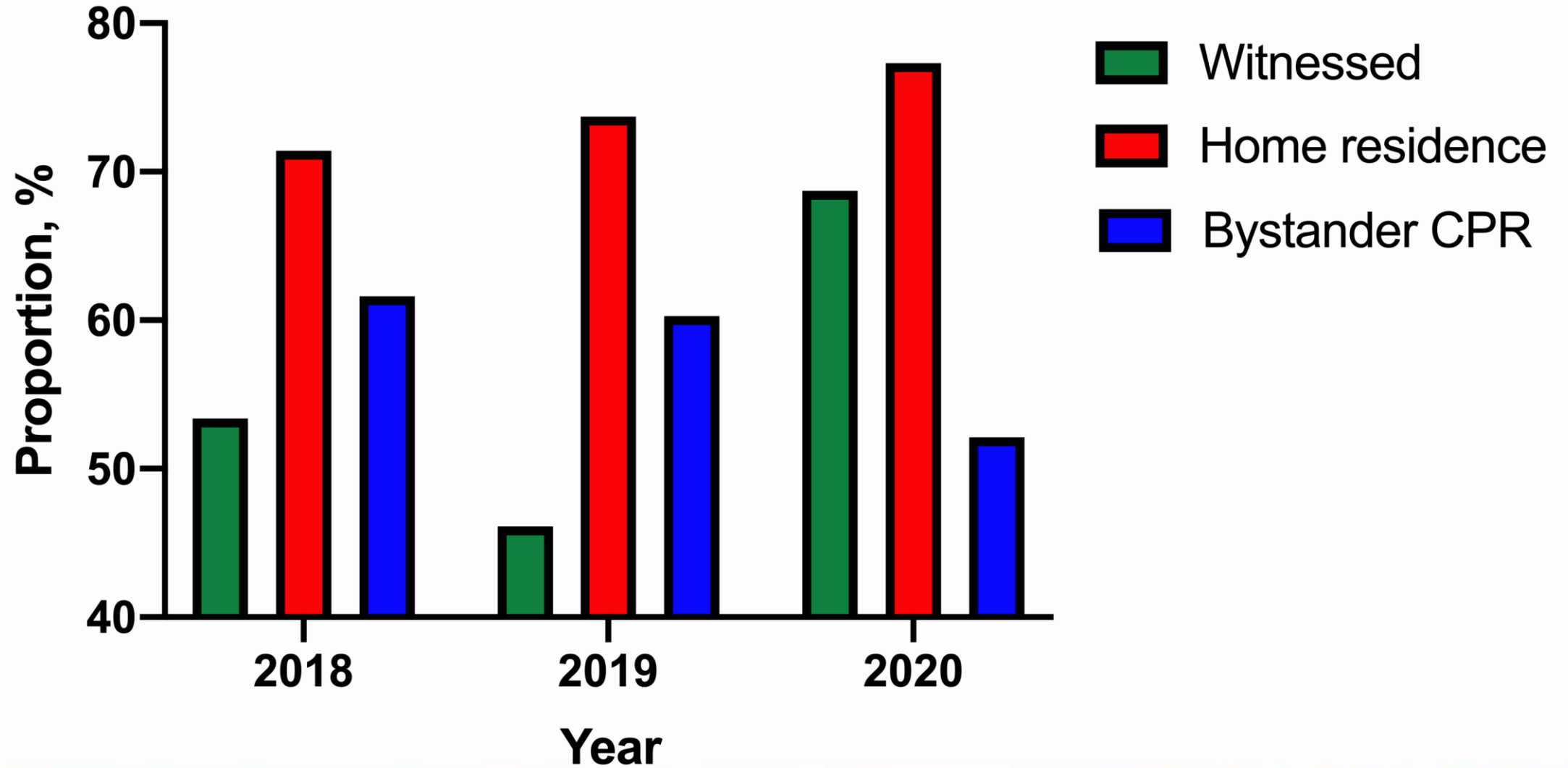
# Methods

- Data will be extracted from the PAROS registry, and variables of interest include demographics, characteristics of OHCA, bystander interventions, EMS response times, and pre-hospital ROSC.
- Data from 1<sup>st</sup> January 2020 to 31<sup>st</sup> May 2020 will be compared with that from 1<sup>st</sup> January to 31<sup>st</sup> May 2018 and 2019.
- All adult EMS-attended OHCA patients (defined as  $\geq 18$  years old), regardless of aetiology, will be included in the study.
- The primary outcome is pre-hospital return of spontaneous circulation (ROSC).

# Preliminary Data

| Characteristics              | Jan – May 2018 (n=1213) | Jan – May 2019 (n=1280) | Jan – May 2020 (n=1400) |
|------------------------------|-------------------------|-------------------------|-------------------------|
| Age in years, median (IQR)   | 71 (59 – 82)            | 71 (60 – 83)            | 73 (60 – 84)            |
| Male gender, n(%)            | 779 (64.2)              | 818 (63.9)              | 882 (63.0)              |
| Home residence, n(%)         | 866 (71.4)              | 943 (73.7)              | 1082 (77.3)             |
| Bystander witnessed, n(%)    | 519 (42.8)              | 459 (35.9)              | 805 (57.5)              |
| Bystander CPR, n(%)          | 747 (61.6)              | 772 (60.3)              | 729 (52.1)              |
| Bystander AED applied, n(%)  | 66 (5.4)                | 142 (11.1)              | 128 (9.1)               |
| Shockable rhythm, n(%)       | 191 (15.7)              | 198 (15.5)              | 197 (14.1)              |
| Response times, median (IQR) | 8:15 (6:40 – 10:28)     | 8:01 (6:32 – 9:46)      | 8:38 (6:54 – 10:26)     |
| Pre-hospital ROSC, n(%)      | 164 (13.5)              | 160 (12.5)              | 130 (9.3)               |

# OHCA Characteristics



THANK YOU

