Improving Outcomes from Pre-hospital and Emergency Care across the Asia-Pacific

STUDY PROPOSAL REQUEST FORM

Please complete the form and email to PAROS secretariat at paros.secretariat@yahoo.com by the stipulated date. You will be notified in due time on whether your study has been accepted for presentation.

1. BASIC INFORMATION

<table>
<thead>
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2. TYPE OF REQUEST (Please select one)

- [x] New Study Proposal (initial)
- [ ] Secondary Analyses
- [ ] Explanatory Analyses

3. STUDY TITLE

BARRIERS TO DISPATCHER-ASSISTED CARDIOPULMONARY RESUSCITATION (DA-CPR)

4. ABSTRACT OF STUDY PROPOSAL

In no more than 350 words, describe the study under the given headings below.

Objectives/Hypotheses
Dispenser-assisted CPR (DA-CPR) has emerged as an effective intervention to increase bystander CPR and hence OHCA outcomes. We aim to assess the impact of a DA-CPR package that has been implemented by several PAROS participating countries on bystander CPR rates and on survival for OHCA. We also aim to describe the barriers to DA-CPR. We hypothesized that DA-CPR would be associated with a high rate of CPR performance by overcoming some of the barriers encountered by emergency callers. This study allows us to show the effectiveness of a low-cost DA-CPR package on OHCA outcomes and identify system-dependent or cultural-based barriers to DA-CPR in the PAROS participating countries.

Methodology (To include sample size, settings, inclusion & exclusion criteria, etc. For secondary & explanatory analyses: include statistical plan, type of analyses, measurement, etc.)
The primary outcome of this study is survival to hospital discharge or survival to 30 days post cardiac arrest. Secondary outcomes include community bystander DA-CPR rates, community bystander non DA-CPR rates, ROSC, survival to hospital admission, neurological status on hospital discharge or 30th day post cardiac arrest, if not discharged. These outcomes will be compared before and after DA-CPR implementation, within sites. PAROS sites that do not have DA-CPR will also be used as controls for comparison of outcomes between sites.

OHCA cases with DA-CPR instructions given and with the calls reviewed will be used to identify barriers to DA-CPR. Cases where audio recordings are incomplete (corrupted data) or of insufficient audio quality will be excluded from analysis; cases where bystander CPR was already ongoing at the time call was received will also be excluded. Variables included for analysis are: timings (e.g. time dispatcher took to recognize need for CPR, time dispatcher took to begin instructions, etc.) and barriers to CPR (e.g. language barrier, caller refused to perform CPR, difficult access to patient, etc.). Association between categorical variables will be assessed using chi-square test, while association between continuous variables will be assessed using Wilcoxon rank sum test.
**Significance of the study** (e.g. provide brief description on how the study can improve current systems, its benefit to patients and how it can be implemented)

This study allows us to show the effectiveness of a low-cost DA-CPR package on OHCA outcomes and identify system-dependent or cultural-based barriers to DA-CPR in the PAROS participating countries. These can help in guiding policy change and developing programs/public health messages that can overcome barriers to DA-CPR, thus increasing bystander CPR rate and OHCA survival. The results gleaned from this study may also inform the implementation of DA-CPR in other developing EMS systems.

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**GUIDELINES FOR PREPARING NEW PROPOSAL PRESENTATION**

If your study proposal has been accepted for presentation, you will be notified by the Secretariat.

Please prepare your presentation slides in accordance to the following instructions. Each presenter is given 10 minutes to present (8min presentation + 2min Q&A).

**General Instructions**

1. Presentation must include the following sections:
   a. Introduction
   b. Objectives/Hypotheses
   c. Methodology
   d. Significance

2. Limit total number of slides to not more than 12. The following are the recommended number of slides for each section.
   a. Introduction – maximum of 2 slides
   b. Objectives/Hypotheses – maximum of 2 slides
   c. Methodology – maximum of 6 slides
   d. Significance – maximum of 2 slides
3. Try to use big fonts and contrasting colours to increase readability e.g.
   a. Black/dark blue font against white background
   b. White/yellow font against black background
   c. Black font against blue background

For any enquiries, please contact PAROS secretariat at paros.secretariat@yahoo.com