



(AP083) Is telephone CPR contributing to bystander CPR?

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Introduction

Telephone CPR (t-CPR) has become the standard in Irish Ambulance Control Centres. It is known that t-CPR increases the rate of bystander CPR (b-CPR)¹. This study examined to what extent t-CPR contributes to bystander CPR.

Methods

Cases of cardiac arrests in the National Ambulance Service (Midland area) for the period 2011-2012 were examined. 170 cardiac arrest calls were identified for this study. Recordings in the control centre and paramedic 'patient care report' forms (PCR) were examined.

Objectives

The aim of this study was to:

1. Identify the proportion of cardiac arrests where paramedics had documented bystander CPR prior to their arrival.
2. Identify the contribution telephone CPR is making to bystander CPR before the arrival of Emergency Medical Services (EMS).
3. To categorise all those performing bystander CPR.

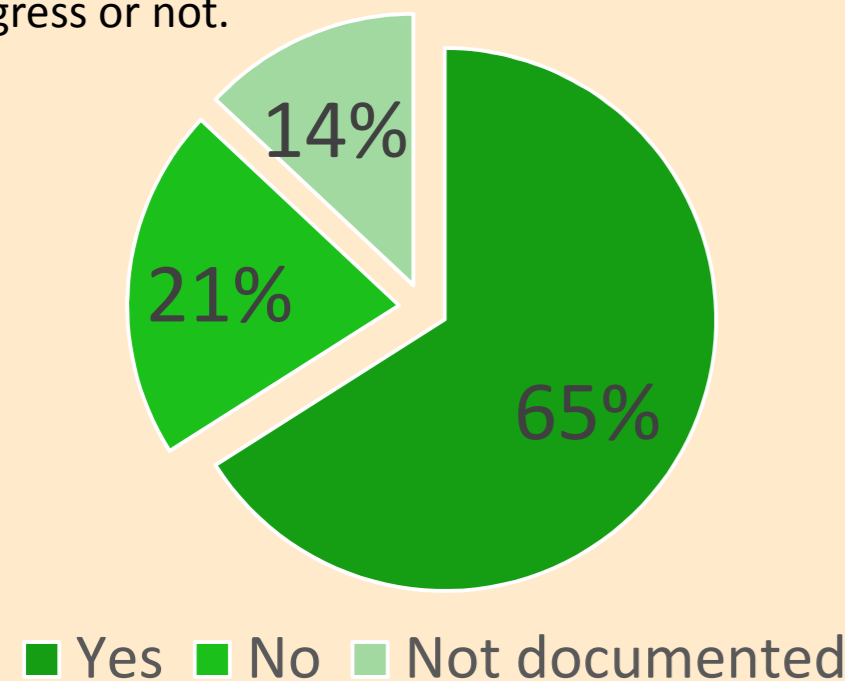
Limitations

While the number of cases is small they are consistent with national cardiac arrest rates of approximately 39 per 100,000 persons².

Result 1 – Documented rate of bystander CPR

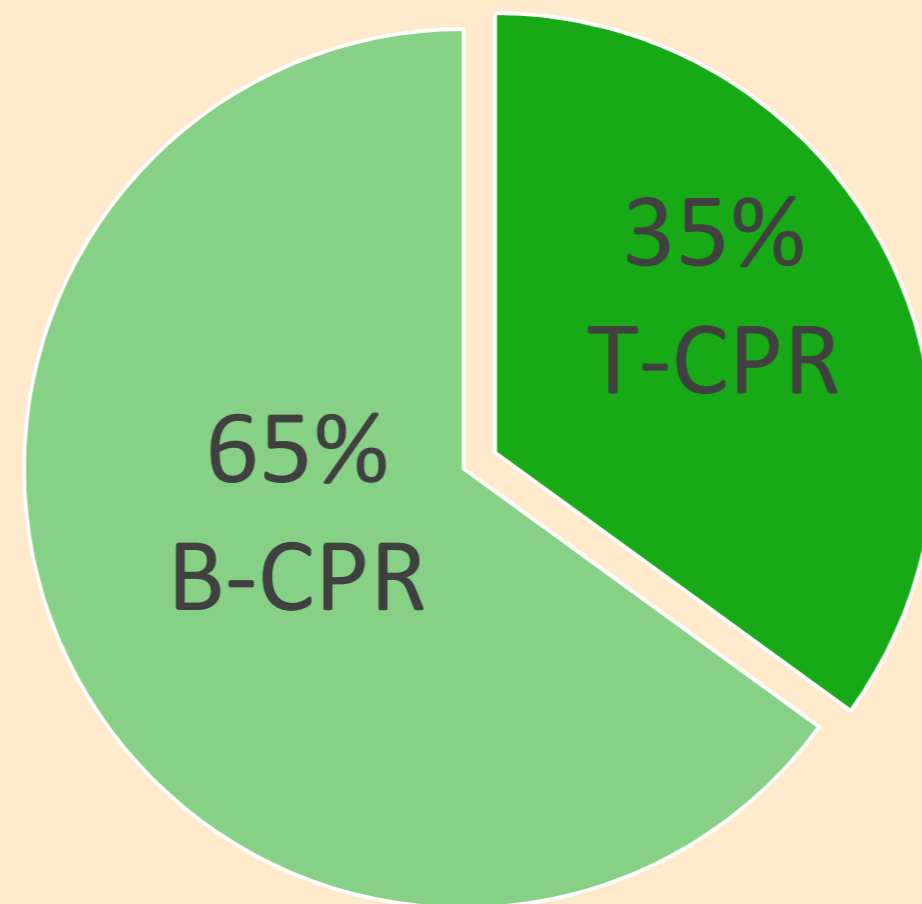
Of the 202 cases, patient care data was available in 84% (N=170/202):

- 65% (N=111/170) of patients were receiving b-CPR before the arrival of the ambulance, as documented on Patient Care Reports by Paramedics and Advanced Paramedics.
- 21% was documented as having no b-CPR in progress
- 14% did not document whether b-CPR was in progress or not.

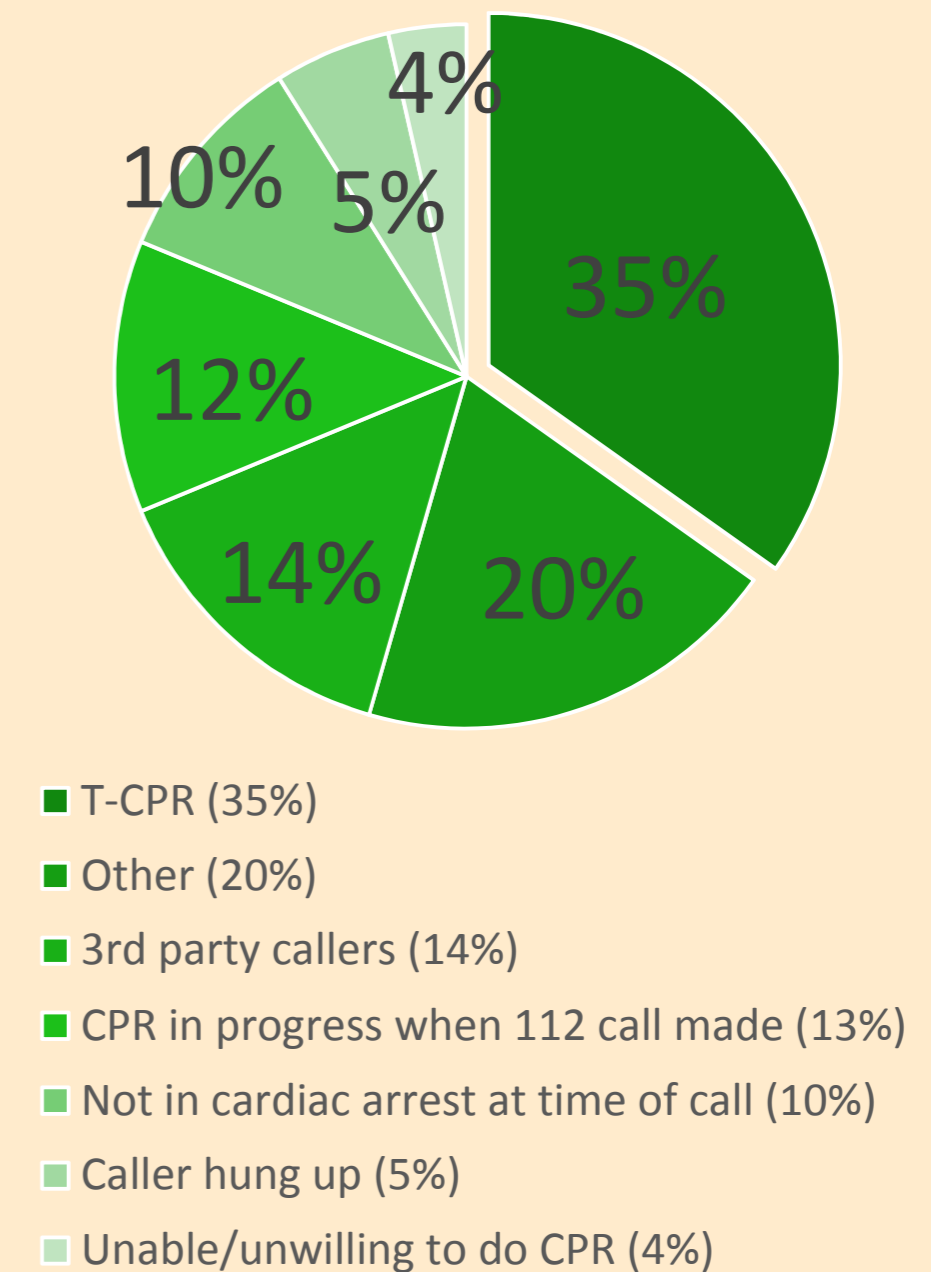


Result 2 – Contribution of t-CPR to b-CPR

By referencing the dispatcher and PCR data the study determined that of all bystander CPR, 35% (N=39/111) were receiving telephone assisted CPR.



Result 3 – Categories of those performing b-CPR



Conclusion

This study shows that telephone CPR plays a significant role (35%) in b-CPR rates. Further research on a larger scale is needed to examine if this is a true reflection of t-CPR. Further work is needed to identify how the rate of t-CPR can be increased. Documentation rates of b-CPR should be improved to ensure a high quality of data.

Recommendations

As control centre staff are an integral link in the 'chain of survival' their contribution must be recognised. This may be achieved by way of feedback and debriefing calls with control centre staff.

References

- ¹Keiko Fujie, Yoshio Kakata, Susumu Yasuda, Do dispatcher instructions facilitate bystander - initiated cardiopulmonary resuscitation and improve outcomes in patients with out-of-hospital cardiac arrest? A comparison of family and non-family bystanders, (2014) Resuscitation: 85 (2014) 315-319
- ²OHCAR, 5th Annual Report 2013 National Out-of-Hospital Cardiac Arrest Register, (2013)