

Oral presentation

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Incidence of unexpected out-of-hospital death in Norway

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Introduction

In Norway, there is a lack of reliable epidemiological data on emergency situations. Approximately 5 000 unexpected out-of-hospital cardiac arrests has been the figure used by The Norwegian Resuscitation Council and other organisations when promoting the importance of knowledge in cardiopulmonary resuscitation (CPR). As part of a multicenter study on how out-of-hospital emergency patients are administrated, we also collected epidemiological data. The aim of this substudy was to describe the incidence of unexpected death/resuscitated patients outside hospitals in Norway, per year.

Methods

During three months from October to December 2007 three dispatch centrals, covering 840 000 inhabitants, recorded every emergency patient (red response, highest priority) where the doctor on call and/or the ambulance responded. We also collected ambulance records, air ambulance records and records from the GPs when they had been involved.

Results

A total of 5 105 cases were included in the study and in 191 (3.7%) of the cases patients where either pronounced dead at scene or CPR was started. In 12 trauma patients there were no resuscitation attempts. In three (42.9%) of the seven suicide cases CPR was started. In other medical emergencies, CPR was started in 54.6% of 172 cases.

National estimate for out-of-hospital cardiac arrest (of any cause) are approximately 4 300. 360 patients will be dead at scene after trauma or suicide. Of approximately 3 900 other cardiac arrest, resuscitation will be started in 2 100 cases. Nearly 700 will be transported to hospitals with pulse or under ongoing CPR.

Conclusion

National estimates indicate that ambulance personnel and doctors will find it beneficial to try CPR on approximately 2100 patients, the rest are pronounced dead at scene. The estimate of 5 000 unexpected out-of-hospital cardiac arrest is probably too high when promoting benefit of CPR.