

## REFERENCE

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### 37 EMERGENCY MEDICAL DISPATCHERS' PERCEPTION OF BARRIERS IN HANDLING EMERGENCY CALLS. A QUALITATIVE STUDY

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**Aim** Medical dispatching is a highly complex procedure and has an impact upon patient outcome. It includes handling emergency calls, prioritisation of resources and the provision of guidance and instructions to callers. Whilst emergency medical dispatchers play a key role in the process, their perception of the process is rarely reported. We explored emergency medical dispatchers' perception of their role in emergency call handling and their perception of barriers.

**Methods** An explorative qualitative interview study was designed. Modified grounded theory was used for the data analysis.

**Results** A total of 5 paramedics and 6 registered nurses were interviewed. A model of the emergency call handling process was drawn based on the data. The analysis of barriers resulted in themes relating to the callers and the medical dispatchers, from whom four and three respective themes were identified. For callers, the motive for calling, the situation, the perception and presentation of the problem was influencing factors. For the dispatchers the expertise, teamwork and organisation influenced the process.

**Conclusion** The results indicate factors influencing the medical dispatch process, as perceived by medical dispatchers. Callers lack knowledge about best utilisation of the emergency number and the medical dispatching process, which can be improved by public awareness campaigns and incorporation of knowledge in first aid courses. For medical dispatchers the most potent modifiable factors were based upon the continuous professional development of the medical dispatchers and the system that supports them.

**Conflict of interest** None declared.

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### 38 A 5 YEAR COMPARISON OF PUBLIC RECOGNITION AND WILLINGNESS TO PERFORM BYSTANDER CPR IN A METROPOLITAN CITY

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**Aim** Bystander cardiopulmonary resuscitation (CPR) plays an important role in improving survival rate of sudden cardiac arrest patients. Various measures can be implemented to

achieve better outcome in bystander CPR. We aimed to compare CPR willingness, public CPR recognition, and CPR education between a 5 year interval. Nationwide and regional public interventions involving public education, research, and automated defibrillator (AED) installation were made during the period.

**Methods** Two surveys separated with a 5 year gap were done using structured questionnaires, targeting a total of 2141 citizens in a single metropolitan city. Respondents' general demographic characteristics, CPR knowledge and willingness, and status of CPR education were questioned.

**Results** After the interventions, the rate of respondents willing to perform CPR (73.8 vs 76.0%,  $p=0.269$ ) and recognising CPR (89.6% vs 90.8%,  $p=0.343$ ) were increased, but not with statistical significance. More respondents were aware of AEDs (26.1% vs 84.4%,  $p<0.001$ ) and specific knowledge in performing CPR (1.6% vs 11.8%,  $p<0.001$ ), possibly leading to more confidence in performing CPR (33.9% vs 45.4%,  $p<0.001$ ). Regarding CPR education, the portion of respondents with education experience (36.5% vs 56.6%,  $p<0.001$ ) and willing to seek future CPR education (75.8% vs 86.6%,  $p<0.001$ ) were higher.

**Conclusion** Various interventions to promote bystander CPR were associated with confidence in performing bystander CPR, AED recognition and CPR education. However, bystander CPR willingness and public CPR recognition were not significantly altered.

**Conflict of interest** None declared.

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### 39 HELIPORT PROXIMITY IS CRUCIAL IN REDUCING TREATMENT DELAY IN PATIENTS WITH ST-ELEVATION MYOCARDIAL INFARCTION TRANSPORTED BY HELICOPTER – HELIPROXY STUDY

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**Aim** Since 2014, HEMS (Helicopter Emergency Medical System) has been an integrated part of the emergency medical system, providing fast and high-competence helicopter transport of patients to highly specialised care. Different heliport solutions at the receiving hospitals may have an impact on the time delay from landing to treatment (LTT). In this study, we compared the time delay from landing to arrival at the catheterization laboratory in patients with ST Elevation Myocardial Infarction (STEMI) accepted for primary Percutaneous Coronary Intervention (pPCI) at one of the four centres in Denmark. We hypothesised that heliport proximity strongly influence the LTT.

**Methods** We prospectively recorded the time from the landing at the heliport to arrival at the catheterization laboratory from October 1st 2014 to December 31st 2016 in all STEMI patients transported by HEMS Denmark. LTT was compared between two centres with heliports at the hospital, and two centres with heliport located outside the hospital, necessitating ground transportation in ambulance.

**Results** 1163 patients were included in the study. 310 were excluded due to missing data. The two hospitals with hospital based heliports showed shorter LTT compared to the two