Different Dialing Method Affect the Effect of Dispatch-Assisted Cardiopulmonary Resuscitation (DACPR).

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Background

DACPR means dispatcher instruct bystander to do CPR on OHCA patient through a phone.

Our dispatchers in Taichung Fire Bureau reported it easier to instruct CPR through mobile phone than telephone.

Difference between DACPR via telephone and mobile phone were surveillance.

Method

- Data of OHCA events between May 1, 2017 and May 31, 2018 In Taichung City were retrieved from Taichung OHCA registry system.
- Grouping method were shown in Chart 1.
- Clinical outcome, cumulative time and success rate of milestones were compared.

Chart 1:
Inclusion and grouping flowchart

Result & Discussion

Instruct DACPR via mobile phone may promote effectiveness by overcoming difficulties to recognize, instruct and perform chest compression.

However, obstacles in phone transferring and GPS positioning should be overcome to further improve clinical outcomes.

Conclusion

Call EMS through mobile phone should be promoted in the future.

Chart 2: Comparing cumulative time of milestones

Table 1: Comparing clinical outcomes and success rate of milestones

	OHCA Recognize (%) (N)	CPR Instruct (%) (N)	Chest Compress (%) (N)	ROSC (%) (N)	Survival To Discharge (%) (N)
Mobile phone N = 814	76.2% (381)	91.6% (349)	95.7% (334)	18.5% (152)	2.3% (19)
Telephone N = 1369	76.1 (583)	90.4% (527)	86% (453)	18.6% (257)	1.6% (13)
	P=0.97	P=0.52	P < 0.001	p=0.94	P=0.28
Transfer to Mobile Phone N = 564	89.1% (335)	93.7% (314)	90.5% (284)	16.6% (94)	1.8% (10)
Stay on Telephone N = 805	63.6% (248)	85.9% (213)	79.3 (169)	20.1% (163)	1.5% (12)
	p < 0.001	P = 0.001	P=0.169	P=0.106	P=0.671