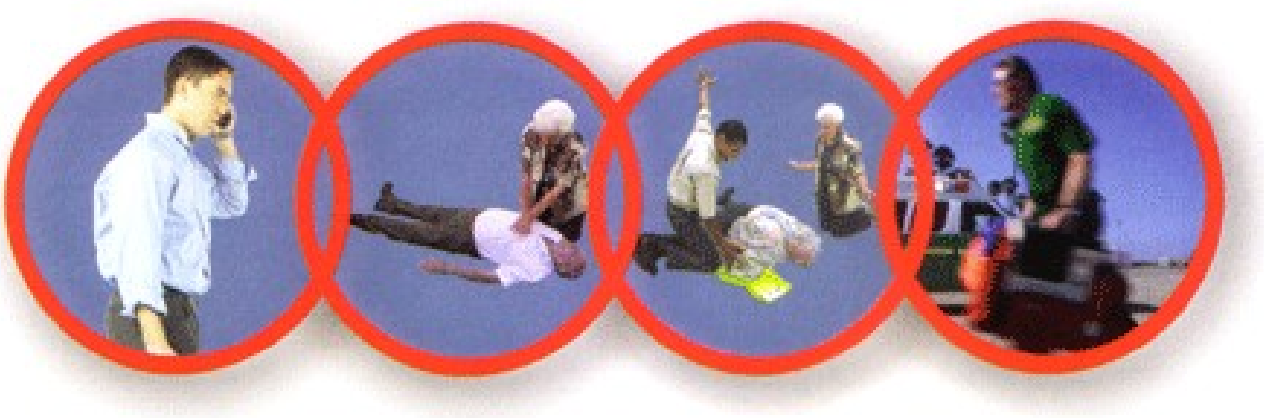
Videokonferanse mellom 113 og legfolk i akutte situasjoner

Supporting lay bystanders during out-of-hospital cardiac arrest
- comparison of video calls and audio calls for instructions and supervision



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Hjertestans og traumer er ledende dødsårsaker

113


AMK/FKS - Tromsø

Hvorfor bør vi bruke videokonferanse med legfolk i akuttmedisinske situasjoner?

– og hvorfor ikke?

3 grunner for videokonferanse ved hjertestans

Videokonferanse gjør legfolk tryggere

Spørreskjema ble brukt for å måle forståelse, trygghet og nytte av teknologi

Forståelse

Trygghet

Egnethet

1 Din alder (fyll ut)…. **2 Kjønn** (fyll ut) …..

3 Har du gjennomgått opplæring i livredning i løpet av de tre siste år? Ja … Nei …

4 Har du tidligere erfaring fra virkelige akuttmedisinske situasjoner? Ja … Nei …

5 Hvor greit var det å forstå instruksjonen du mottok i forsøket?

Svært vanskelig… Litt vanskelig… Ganske greit… Helt greit…

Eventuell kommentar: ……

……

……

6 Var du usikker på om dere gjorde det dere skulle i redningsarbeidet?

Usikker… Ganske sikker … Sikker ... Vet ikke …

Eventuelt hvorfor? ……

……

……

7 Mener du telefon med videokommunikasjon er bedre eller dårligere egnet enn vanlig telefon i akuttmedisinske situasjoner, f. eks. ved livredning, ulykker og/eller annet?

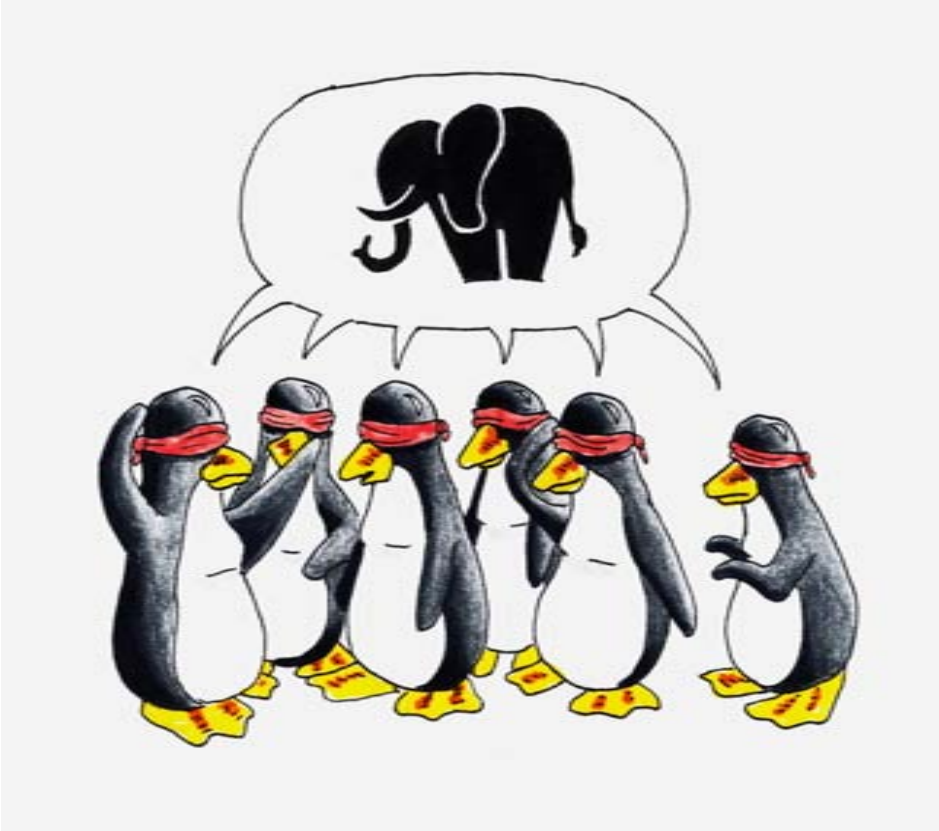
Spiller ingen rolle… Dårligere… Bedre ... Vet ikke …

Eventuelt hvorfor? ……

……

……

Videokonferanse gir bedre forståelse og bedre kommunikasjon



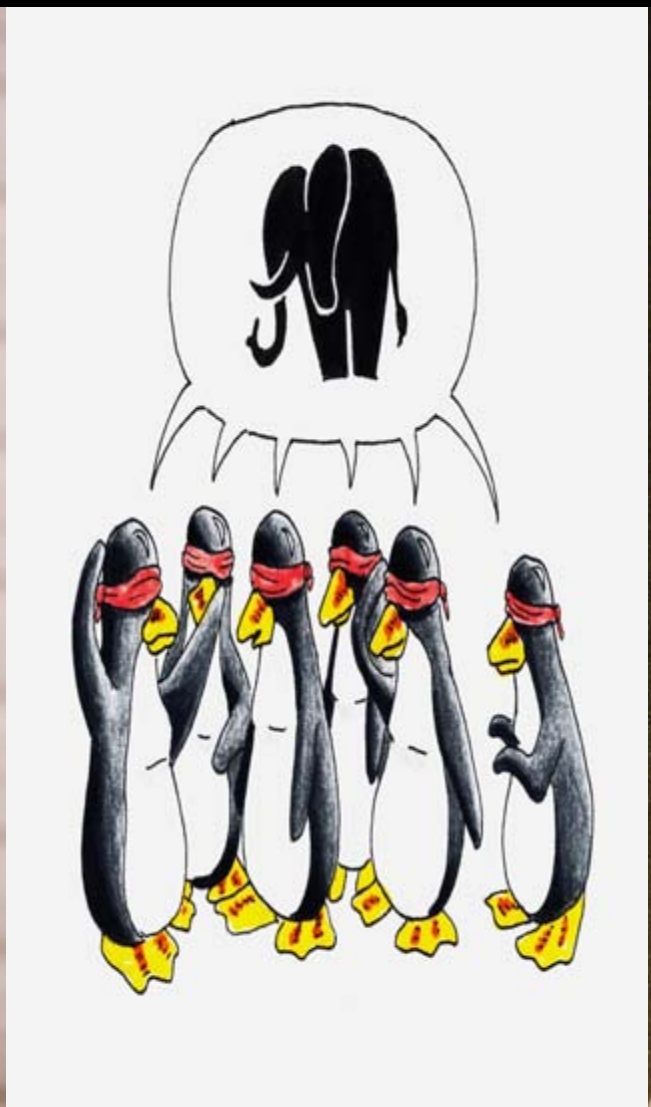
AMK-sykepleierne ble intervjuet etter forsøkene

Videokonferanse sparer tid, og kan forbedre kvaliteten på gjenoppliving

Videokonferanse sparte i snitt et halvt minutt i hvert scenario (p=0.05)

1

2



3

RESEARCH

Video calls for dispatcher-assisted cardiopulmonary resuscitation can i… the confidence of lay rescuers – sur… after simulated cardiac arrest

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Sumr… Many… durin… inform… schoo… mobi… dispa… unde… years… group… cardi… imma… video… emer… super…

Introduct…

Early initiatec… (CPR) improv… current low r… significantly t… cardiac arrest.

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journal homepage: www.elsevier.com/locate/resuscitation

MANIKIN AND SIMULATION STUDY

TO SEE OR NOT TO SEE—Better dispatcher-assisted CPR with video-calls? A qualitative study based on simulated trials☆

le

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11 March 2008; accepted 10 April 2008

…deo communication through mobile telephone is now available in many parts …e ask how mobile phone video-calls compares with traditional phone calls for …sted cardiopulmonary resuscitation (T-CPR).
…ry data was collected through individual interviews with six dispatchers after …ion in simulated cardiac arrest. They had 10 scenarios each, during which they …on resuscitation. During half of the scenarios they used video-calls, and tradi… …ls for the rest. Concepts from modern systems theory were used to analyse the …

…calls influenced the information basis and understanding of the dispatchers. The …erienced that (1) video-calls are useful for obtaining information and provides …ionality to support CPR assistance; (2) their CPR assistance becomes easier; (3) …be of better quality; but (4) there is a risk of "noise". …mphasize visual observation as a way of constructing professional understanding …o-calls, which may provide a new basis for dispatcher assistance. Video-calls …scuer compliance. The role and content of telephone-directed protocols used …may need adjustments when video-calls are used for medical emergencies. …eo communication can improve the dispatchers' understanding of the rescuer's …he assistance they provide.

Introduction

…this article …doi:10.1016/ …ment),

Mobile telephones have found their way into most people's pockets and changed the way people interact during both work and leisure time. During medical emergencies, communication technologies are invaluable tools for communication, collaboration and coordination of resources. Soon, mobile video telephones might be used

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Can video mobile phones improve CPR quality when used for dispatcher assistance during simulated cardiac arrest?

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Background: Because mobile telephones may support video calls, emergency medical dispatchers may now connect visually with bystanders during pre-hospital cardiopulmonary resuscitation (CPR). We studied the quality of simulated dispatcher-assisted CPR when guidance was delivered to rescuers by video calls or audio calls from mobile phones.

Methods: One hundred and eighty high school students were randomly assigned in groups of three to communicate via video calls or audio calls with experienced nurse dispatchers at a Hospital Emergency Medical Dispatch Center. CPR was performed on a recording resuscitation manikin during simulated cardiac arrest. Quality of CPR and time factors were compared depending on the type of communication used.

Results: The median CPR time without chest compression ('hands-off time') was shorter in the video-call group vs. the audio-call group (303 vs. 331 s; $P = 0.048$), but the median time to first compression was not shorter (104 vs. 102 s; $P = 0.29$). The median time to first ventilation was insignificantly shorter in the video-call group (176 vs. 205 s; $P = 0.16$). This group also had a slightly higher proportion of ventilations without error (0.11 vs. 0.06; $P = 0.30$).

Conclusion: Video communication is unlikely to improve telephone CPR (t-CPR) significantly without proper training of dispatchers and when using dispatch protocols written for audio-only calls. Improved dispatch procedures and training for handling video calls require further investigation.

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Video calls are now widely available to the public on 3G mobile phones. Dispatchers in centers with technology allowing reception of video calls from the public may have more information from the scene of accidents and other medical emergencies. If dispatchers are enabled to see patients, bystanders and rescue attempts, the information may help dispatchers plan and

tional and international protocols for t-CPR are being used currently.[1–3] Previous studies have yielded conflicting results on the efficacy of t-CPR, and scripted telephone instructions may need change.[1,4–6]

We hypothesized that video communication could improve the quality of lay people CPR by enhancing communication between bystanders