

Danske HLR-AED kurser Kvalitet og overholdelse af guidelines

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På skuldrene af giganter



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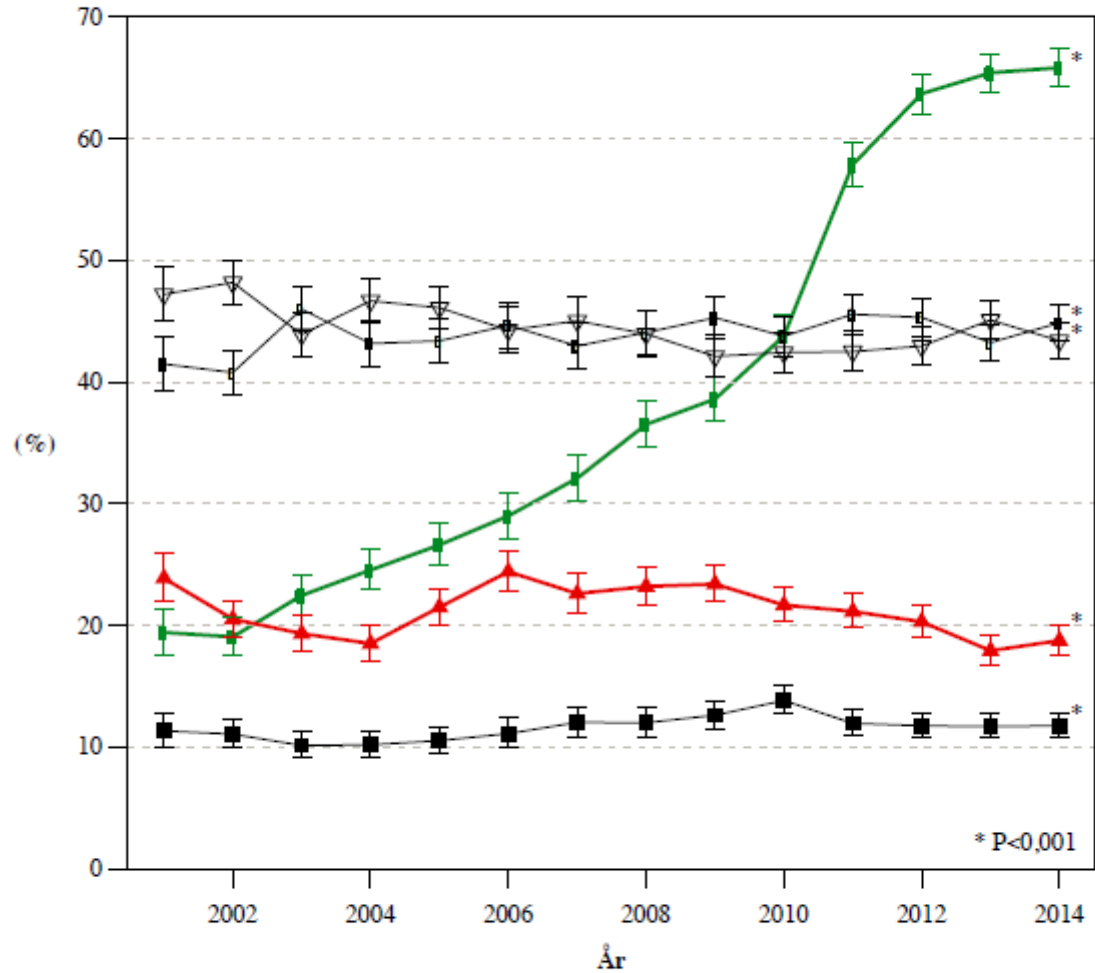
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Tidsmæssig udvikling i HLR inden ankomst af ambulance, bevidnet status og stødbar hjerterytme.

Baggrund



Stagneret..

Kvalitet af 1-1-2 uddannelse

Flere giver HLR

Bedre HLR

- HLR inden ambulancens ankomst
- Bevidnet hjertestop
- Ikke-bevidnet hjertestop
- Stødbar hjerterytme
- Ambulancetjeneste bevidnet hjertestop

Studiets opbygning

Bog analyse



Kursus observation



Opfølgende test



Emergency Medical Services Copenhagen

Evaluation sheet – page 1 of 2

Date: _____ OIB nr: _____ Course number: _____
 Number of participants: _____ Location (city): _____ Number instructor: _____

Professional background (instructor):
 Health Law enforcement Military/Emergency management Other

Nr	Indicator	1	2	3	4	5	6	NA
1.	Course length Announced course start: _____ Actual course start: _____ Announced course end: _____ Actual course end: _____ Loss of time: <input type="checkbox"/> 0-15min <input type="checkbox"/> 16-30min <input type="checkbox"/> 31-45min <input type="checkbox"/> 46min-1 hour <input type="checkbox"/> More than 1 hour							
2.	Quality of training Practical training of participants <input type="checkbox"/> 0-15min <input type="checkbox"/> 16-30min <input type="checkbox"/> 31-45min <input type="checkbox"/> 46min-1 hour <input type="checkbox"/> More than 1 hour Theory <input type="checkbox"/> 0-15min <input type="checkbox"/> 16-30min <input type="checkbox"/> 31-45min <input type="checkbox"/> 46min-1 hour <input type="checkbox"/> More than 1 hour							
3.	Training materials <input type="checkbox"/> 1 mannequin AND <input type="checkbox"/> 1 mannequin per 6 participants AND <input type="checkbox"/> 1 AED-trainer per 6 participants							
4.	Chain of survival Instructor explains every link							
5.	Theory and introduction - Primary measure 1: Early recognition and call for help a) Check for unconsciousness - Shake/stimulate and shout b) Check breathing - Head tilt and chin lift c) Airway breathing - Gaping and mouth opening d) Call for help e) Alerting EMS f) Telephone-CPR							
6.	Quality of training - Primary measure 2: Early CPR a) Hand position - Heel of hand in middle of chest - Interlock fingers b) Compression depth - 3-4cm c) Compression frequency - 100-120/min							

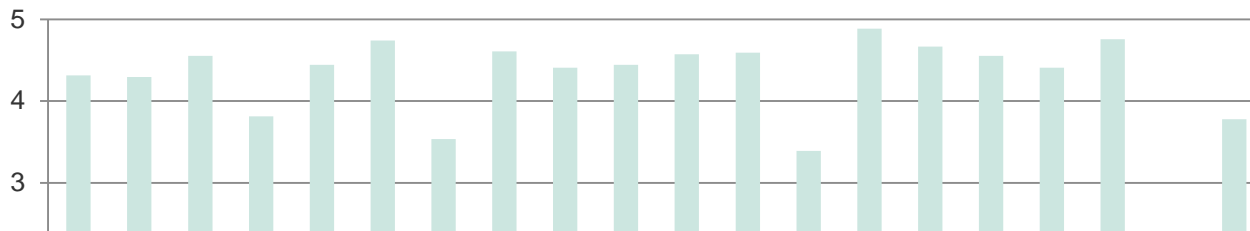
Evaluation sheet – page 1 of 2

d) Compression "recod" - Equal time for pressure and release	Instructor corrects mistakes and/or gives feedback on practical training	EVERY participant perform in practice	Demonstrated by instructor	Explained correctly	Not addressed correct	N/A
e) Compression ventilation - 30:2	Instructor corrects mistakes and/or gives feedback on practical training	EVERY participant perform in practice	Demonstrated by instructor	Explained correctly	Not addressed correct	N/A
f) Airway technique - Head tilt and chin lift - Nasal pinch	Instructor corrects mistakes and/or gives feedback on practical training	EVERY participant perform in practice	Demonstrated by instructor	Explained correctly	Not addressed correct	N/A
g) Rescue breaths - Rise of the chest - 1s per ventilation	Instructor corrects mistakes and/or gives feedback on practical training	EVERY participant perform in practice	Demonstrated by instructor	Explained correctly	Not addressed correct	N/A
7. Quality of training - Primary measure 3: Early defibrillation						N/A
AED instructions	Instructor corrects mistakes and/or gives feedback on practical training	EVERY participant perform in practice	Demonstrated by instructor	Explained correctly	Not addressed correct	N/A
8. Minimizing of "hands off"	Addressed	Not addressed				
9. Quality of training - Secondary measure						N/A
a) Recovery position	Instructor corrects mistakes and/or gives feedback on practical training	EVERY participant perform in practice	Demonstrated by instructor	Explained correctly	Not addressed correct	N/A
b) FIBOA 1 - 5 back blows - 5 Heimlich-manuever	Instructor corrects mistakes and/or gives feedback on practical training	EVERY participant perform in practice	Demonstrated by instructor	Explained correctly	Not addressed correct	N/A
c) CPR for children	5 initial rescue breaths	30:2 OR 15:2 mentioned	Mention that 1/3 of chest compression depth	Mentioned that some element are different from adults	Not addressed correct	N/A
10. Non-technical skills - Explorative observation						N/A
What non-technical skills does the instructor mention? <i>(It is what the instructor teaches not how)</i>						
What non-technical skills does the instructor show when demonstrating?						

Post course evaluation sheet - page 1 of 1

A. Overall use of feedback	Always	Mostly	Sometimes	Rarely	Never
Examples of feedback:					
B. Observed mistakes?					
C. What did the instructor do to motivate the participant?					
D. What did the instructor do to focus the the participants individual learning outcome?					
E. Comments:					

Nationalt gennemsnit



Ur

Kc
K

Results – Items with great variation

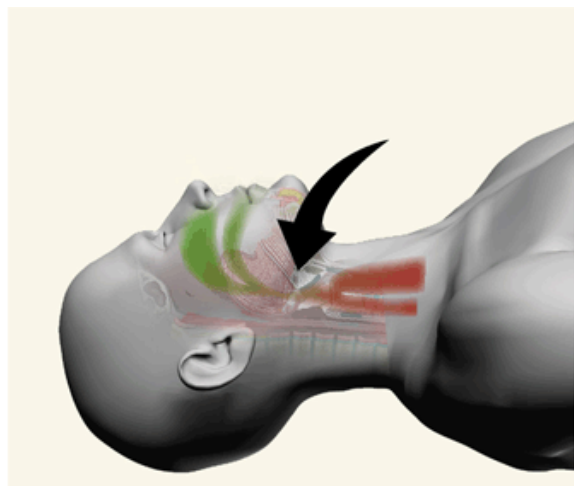


Table 4. Distribution of course observations – coherence to guidelines

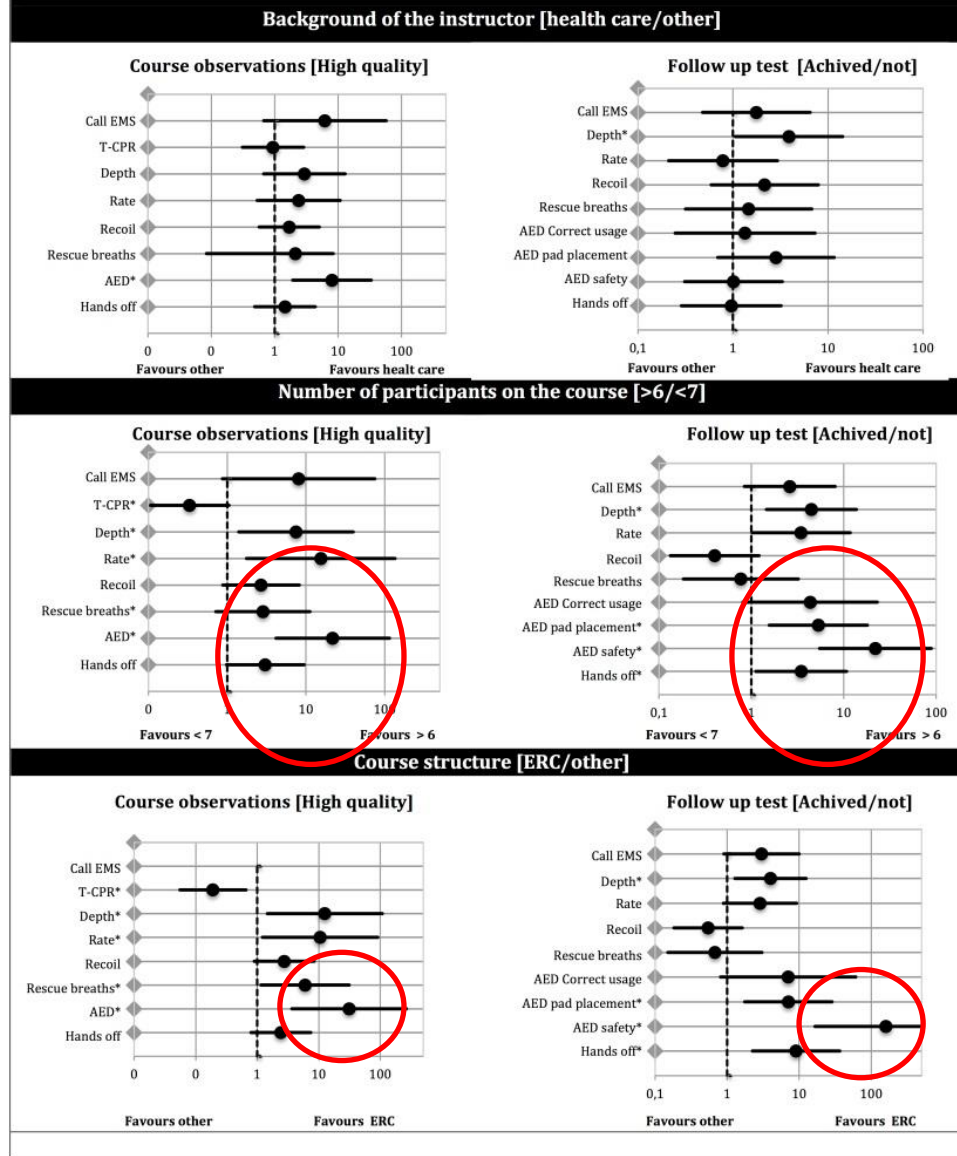
	<u>Background of instructor</u>		<u>N^o participants/N^o instructors</u>		<u>Structure of the course</u>		All
	Health science Count (%)	Other Count (%)	> 6 Count (%)	< 7 Count (%)	Other Count (%)	ERC Count (%)	
Agonal breathing							
No coherence [1]	4 (15)	8 (31)	5 (17)	7 (30)	3 (12)	9 (33)	12
Coherence [2]	23 (85)	18 (69)	25 (83)	16 (70)	24 (88)	17 (67)	41
P-Value [Fishers Exact]		0.2021		0.324		0.0537	
Call 1-1-2							
No coherence [1]	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	0
Coherence [2]	27 (100)	26 (100)	30 (100)	23 (100)	27 (44)	26 (46)	53
P-Value [Fishers Exact]		1.0		1.0		1.0	
T-CPR							
No coherence [1]	17 (63)	16 (62)	22 (73)	11 (45)	12 (44)	21 (81)	33
Coherence [2]	10 (37)	10 (38)	8 (27)	12 (52)	15 (56)	5 (19)	20
P-Value [Fishers Exact]		1.000		0.0867		0.010*	
Depth							
No coherence [1]	0 (0)	5 (19)	1 (3)	4 (17)	5 (19)	0 (0)	5
Coherence [2]	27 (100)	21 (81)	29 (97)	19 (83)	22 (81)	26 (100)	48
P-Value [Fishers Exact]		0.0229*		0.062		0.511	
Rate							
No coherence [1]	2 (7)	3 (12)	0 (0)	5 (22)	5 (19)	0 (0)	5
Coherence [2]	25 (93)	23 (88)	30 (100)	17 (78)	22 (81)	26 (100)	48
P-Value [Fishers Exact]		0.6669		0.012*		0.511	
Recoil							
No coherence [1]	7 (26)	13 (50)	9 (30)	11 (45)	14 (52)	6 (23)	20
Coherence [2]	20 (74)	13 (50)	21 (70)	12 (52)	13 (48)	20 (77)	33
P-Value [Fishers Exact]		0.0929		0.2549		0.0473*	
Ventilations							
No coherence [1]	1 (4)	6 (23)	3 (10)	4 (17)	5 (19)	2 (8)	7
Coherence [2]	26 (81)	20 (62)	27 (83)	19 (57)	22 (52)	24 (92)	46
P-Value [Fishers Exact]		0.0504		0.0689		0.4203	
AED usage							
No coherence [1]	1 (4)	4 (15)	0 (0)	5 (22)	5 (19)	0 (0)	5
Coherence [2]	26 (81)	22 (46)	30 (87)	18 (35)	22 (33)	26 (96)	48
P-Value [Fishers Exact]		0.1917		0.0117*		0.511	
Hands off							
No coherence [1]	10 (37)	12 (46)	9 (30)	13 (57)	14 (52)	8 (31)	22
Coherence [2]	17 (63)	14 (54)	21 (70)	10 (43)	13 (48)	18 (69)	31
P-Value [Fishers Exact]		0.583		0.091		0.166	

* Significant within a 95% margin

Follow up tests



Figure 3. Factors influencing CPR Course and participant skills after a retention period
 - Odds Ratio of low/high quality rating for courses [left] and participants performance after a 4-6 month retention period [right]



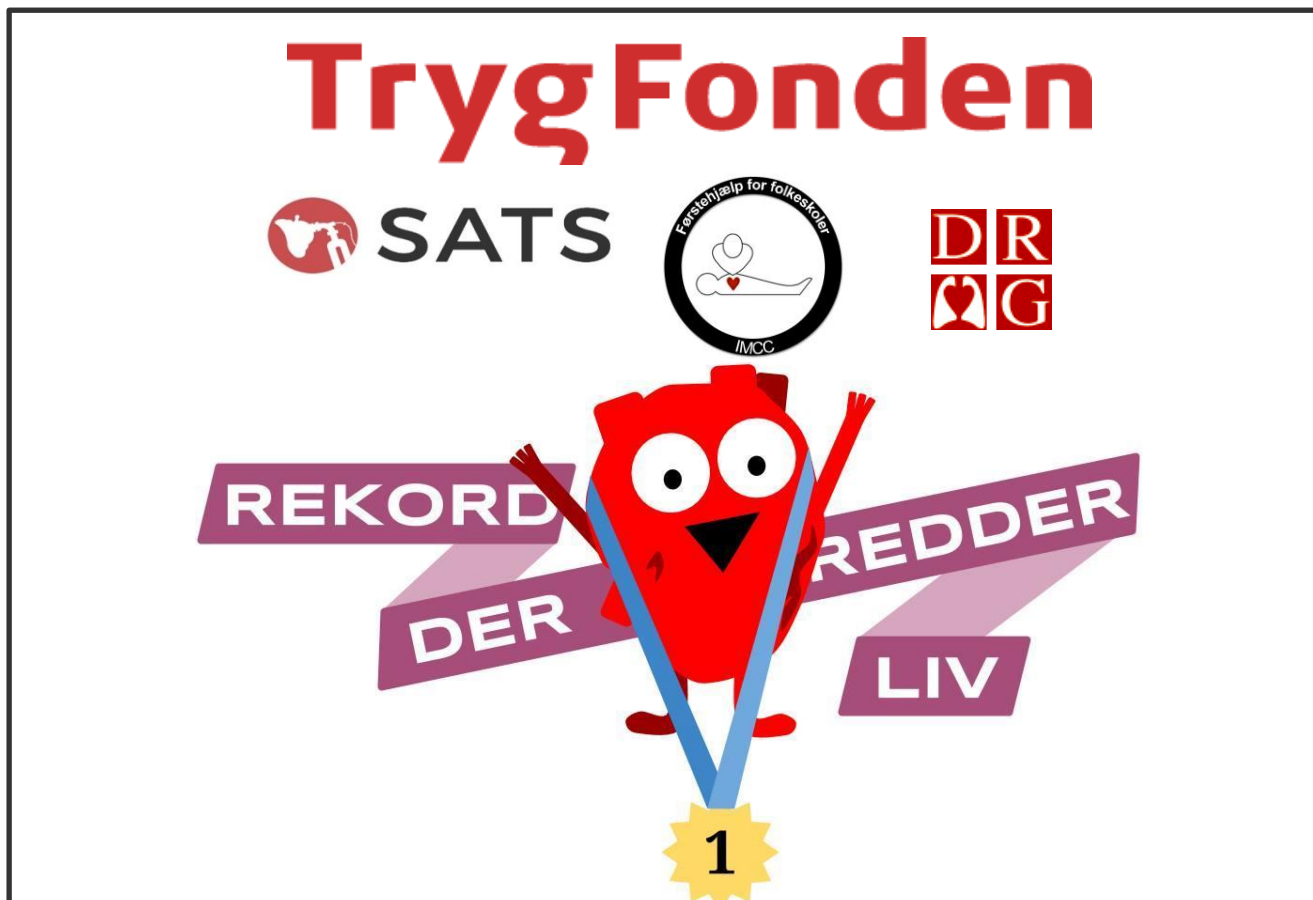
Konklussion

1. Danske kurser har generelt høj kvalitet

2. Der er rum for forbedring, udtølt på undervisning i 1-1-2 vejledning, resili



Danmark - officielle HLR-verdensmestre?



Trygfondens Rekord der Redder liv – et nationalt rekordforsøg
22 Maj 2017!