Effectiveness of using pre-emptive resilience coaching program to enhance prehospital personnel work performance: a randomized controlled pilot study

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Introduction

Paramedic personnel work often in a varying work environment. Unpredictability may cause work-related stress. Good practice, when treating critically ill patients, demands coherent situational awareness of the ongoing scene as well as quick sound decision-making skills. Often prehospital personnel are fighting against time, when treating patients as they try to save the patient's life or prevent secondary harm.

Stress reactions can be positive or negative. An optimal amount of stress helps a person to be more vigilant and alert. However, too much stress is not good. As a physiological response, when stressed, the sympathetic neurological system is activated: respiratory rate is elevated, heart rate rises, and blood pressure elevates. As an opposite, in the more relaxed state, when the parasympathetic system prevails, respiratory rate is moderate or normal, heart rate is slower and blood pressure is in normal range.

The world seems to be changing, which is reflected to everyday work. This demands more resilience on handling acute and chronic stress in the work environment. In Finland, in the Päijät-Häme wellbeing service county, the EMS has ruled since January 2023 that it is mandatory for prehospital personnel to wear a protective vest during every patient interaction. These vests protect the employee from small caliber gunshot wounds and stabbing in close range. Empirically violence towards prehospital personnel has grown (1). Almost as a daily base, prehospital personnel encounter violent patients by themselves as the local police with limited resources have to focus on other missions.

Chronic stress causes long-term diseases such as high blood pressure, diabetes, cardiac events, cancer, and chronic low-grade inflammation (2). Mental problems are prominent after been long-term exposed to stress (3). It is known that the prehospital work environment is more stressful than an average working environment, which exposes to stress-related long-term conditions (4).

The prehospital work community's ability to compensate stress is affected by every individual's resilience to stress. Resilience means ability to adapt to changes, how to cope with the disturbances from normal circumstances and how well can a new normal resumed again. Notice should be focused on acute stress-related encounters as well as cumulative work-related chronic stress, which comes from encountering on one hand many difficult critically ill patient cases and on

the other hand from the prevailing work community's atmosphere. A good and supportive work community helps endure stress. The support of the chief of staff means a lot for the wellbeing of the employees.

It is important to be aware, how prehospital employees are maintained in their workplace. Nowdays, professionally talented and motivated employees might more easily change their occupation, if an individual feels work-related stress becomes too demanding and cumulative. Factors that could ease occupational stress in individuals, and hence keep good employees at work, is the ability to control workload, gain resilience, mutual targets at work, respect of co-workers, an open and supportive communication culture, and support from administrative level. Also, the possibility to follow energy levels during workdays, and how smoothly personal and work life are combinable affect positively. As there is limited human resources in the prehospital field to spare, individual employees feeling well, are together a healthy work community with enough human resources to do the work (5).

Coaching pre-emptive resilience has been proved to be beneficial in improving work ability and work-related health (6). The Finnish police special force group's (called "Karhu squad") previous leader FT Harri Gustafsberg has developed and coached successfully this pre-emptive resilience method called international Performance Resilience and Efficiency Program (iPREP) (7). This scientifically proven iPREP method teaches individual how to cope with stressful situations in an unexpected environment and when decisions have to be made promptly. In this method there are certain mental practices and breathing technics to help cope and gain resilience. At the moment scientifical research is limited in prehospital field from this subject of interest.

Research hypothesis

After going through the pre-emptive resilience coaching "Finnish Sisu Training" the intervention group will have better situational awareness of the scene compared to the control group. The intervention group is also able to recover quicker after a stressful situation. Also, their physiological markers: maximum heart rate, and respiratory rate, and heart rate variability are more in normal range compared to the control group as a sign of less stressed state.

Performing the research

In real life the prehospital personnel encounters critically ill patients as a team. A typical team may include a prehospital physician with a co-paramedic and one or more paramedic units consisting of two paramedics each. The research settings have been designed to be as close as reality as possible. The research method is a randomized controlled trial pilot study and intervention is simulation based.

In this research four voluntary prehospital physicians and 20 voluntary paramedics is aimed to be recruited. A team in each simulation scenario will include a physician and four paramedics. During the simulations the focus is on situational awareness and how well decisions are made based on it. To make the simulation scenes more authentic voluntary lake rescuers, actors, simulation instructors, camera staff, and other voluntary personnel will be also recruited.

Before the research begins informed consent is asked from the study participants. Before the research simulations the study participants are not allowed to drink alcohol in the past 24 hours and should not be on cortisone medication for at least two weeks prior the intervention part of the study. This research excludes pregnant women or individuals that have received prior "Finnish Sisu Training" or iPREP based coaching program. At any moment of the research the study participants are free to leave the study by his or her own announcement. However, we will include into the research the material we have gathered thus far from the study participants.

After recruitment, the local EMS work shift coordinator will raffle the study participants into two groups with two teams each. The groups are the intervention group and the control group respectively.

Every study participant will receive a scientifically proven firstbeat life -wellness service and physiological data device (www.firstbeat.com) for usage for physiological measurements.

The intervention group will go through a two day pre-emptive resilience course "Finnish Sisu Training" specifically designed for prehospital personnel based on iPREP method. The training includes core elements of (a) education about the physiology of the stress response system, energy management, and fuelling for peak performance; (b) group instructions on how to use mental focus and visualization to enhance sensory perception and situational awareness in performance and non-performance settings; (c) instruction and use of biofeedback to practice engaging in controlled breathing exercises that have been shown to enhance central nervous system control during stress;(d) education of cognitive biases.

The simulation scenarios will be executed in ten days after the given pre-emptive resilience course. The intervention consists of three simulations in subsequent days with different scenarios. The study participants will wear a Firstbeat life device, which is attached to the torso with two electrodes that are remotely read from a phone app. Before and after the simulation the study participant fulfills a self-evaluation form. This form is Likert scaled from 1 to 5 and assesses how self-confident the study participant is during simulation scenarios (See attachment).

Simulations are described in more detail in the end of this study protocol (See attachment).

The control group will have an equal opportunity to take part in this pre-emptive resilience training after the research has ended. This opportunity is given in three months after the actual study has ended.

Simulation scenarios

Study participants go through three subsequent simulation scenarios as a part of the prehospital team. During the simulations scenarios situational awareness and decision-making skills are measured. Physiological markers are also measured (respiratory rate before and after each simulation scenario, maximal heart rate and heart rate variability (HRV).

During the simulation all study participants will have an appointed observer, who will fill out the observer form during each simulation scenarios (See attachment). These observer points of situational awareness and decision-making skills will be compared between the intervention and control group. Situational awareness may receive maximum 5 points and decision-making skills maximum 5 points. The observers have a prehospital background and no previous iPREP or "Finnish Sisu Training" and they are blinded by the study group, if their designated observant belonged to intervention or control group.

Data protection

Individual study participants will be given a pseudonym according to the Data Protection Act, which will be used during the rest of research project. The key to convert to the subject number will be securely deposited in the main researcher's secured data files.

The simulations scenarios will be camera-recorded with the permission of the study participants. The filmed material will be deposited in the secured data file. The filmed material will be used for checking for accuracy, when fulfilling observer forms by the observers. These video recordings will not be used for any other purposes. The data will be stored for three years and then deleted.

The gained data will be analyzed with a computer with secure access by the main researchers.

Ethical approval

Ethical approval will be applied from the Helsinki University Hospital Ethical approval board as this study consist of subjecting study participants to mental stress and physiological markers will be measure with FirstBeat life device.

Research schedule

The planning of the research and getting ethical approval is planned to take between February to May 2023. The recruitment of study participants and other volunteers will happen on June-July 2023. September 2023 is aimed to be the intervention period with pre-emptive "Finnish Sisu Training" and ten day later three simulation scenarios during subsequent days. In October-November 2023 we plan to analyze the results. From December 2023 we will start the writing process of the manuscript for a scientifical article. Our aim is to publish in an internationally peer-reviewed journal in 2024.

Budget and Finance of the research

Firstbeat life devise introduction lecture (mandatory for one person)	310 €*

Firstbeat life device ,pack of 10 devides (includes extra electrodes)	1054 €*
Firstbeat 3 months lisences for 10 devices	334,80 €*,**
Head of staff of camera recording and defusing councellor	2000 €
article publication fees	3000 €
language correction fees	1000 €
additional expencies (15% extra)	1004,82 €
Alltogether	**8703,62 €**

*includes 24% tax payment, ** Firstbeat life has made an offer for a pack of ten devices, which is cheaper than buying them individually.

Finance is going to be applied from private foundations and from governmental research funds or self-funded by the research team.

Purpose of this research

This research is designed to improve the development of prehospital personnels' wellbeing. We want to keep good professionals in our field of work and to be fit working for the long run. The meaning for this specified research study is to investigate if pre-emptive reliance coaching would benefit prehospital personnel in gaining more resilience at work but also in their personal lives. This would then reflect on the wellbeing of the whole prehospital work community. These results could further be implanted for instance to the emergency department and surgical operation units. It might even affect positively on the balance of the hospital's yearly funds as less sick-day leaves may be held.

Literature

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Attachment 1

Self-evaluation form

Respiratory rate prior simulation_____ times/minute
Respiratory rate after simulation_____ times/minute

(1 very insecure – 2 mostly insecure – 3 does not know – 4confident – 5 very confident)

1. I feel confident, and I will manage the simulation scenario well.

   1 2 3 4 5

2. I consider having good situational awareness.

   1 2 3 4 5

3. I am able to make decisions easily.

   1 2 3 4 5

4. I believe, it will be easy to commence to other duties after the simulation.

   1 2 3 4 5

Attachment 2

Observer form, simulation scenario 1

Observant study number:_____

Situational awareness

1. Environmental awareness. Can the observant see with eye contact and/or verbalize the condition of the apartment with empty medication packages, whisky bottle, and small children toys:
   Yes____ (1 point) No ____

2. Active or passive involvement of preliminary survey using cABDCEF approach Yes____ (1 point) No____

3. Appearance of the threatening father noticed Yes____ (1 point) No_____

4. Gun noticed and a rational emotion of awareness Yes____ (1 point) No_____

5. Team performance flow meaning fluent working together Yes____ (1 point) No_____

Decision-making skills

1. One paramedic taking leadership and tasking to others in the team different work roles
   Yes____ (1 point) No _____

2. Performing roles adequately according to tasking
   Yes____(1 point) No. _____

3. Non-technical crew management (CRM) communication used
   Yes ____(1 point) No _____

   guidance for observing non-technical communication:
   -Not seen any CRM communication (cross: no)
   -A single closed loop confirmation of another team member's sayings (cross: no)
   -Some closed loop confirmation of other team member's sayings (cross: no)
   -Interactive closed-loop communication with eye contact and physical gestures (cross: yes)
   -Highly interactive and systematically approached CRM communication involving verbal and physical gestures of non-technical communication technics leading to joint decision-making (cross: yes)

4. Acting appropriately to the threatening man with the gun. Verbal or silent gesture of decision-making of an exit-plan regard on team safety
   Yes_____(1 point) No____

5. Overall decision making of team safety
   Yes_____ (1 point) No_____

   guidance to observing team safety decision-making:
   -No sign of team safety decision- making (cross: No)
   -A single verbal decision-making of overall team safety recorded, but no action (cross: No)
   -Some verbal decision-making of team overall safety, but no action (cross: No)
   -Interactive decision-making skills of overall team safety verbal and action with equipment placement (cross: yes)

-Systematically interactive decision-making of overall team safety with verbal communication of exit plan, equipment placement, understanding a possibility of the unexpected and how the team is situated in the appartement as not turning one's back from the front door that is kept open. (cross: yes)

Attachment 3

Observer form, simulation scenario 2

Observant study number:_____

Situational awareness

1. Environment awareness. Can the observant see with eye contact and/or verbalize the condition of the apartment's condition: food in the fridge, two home care folders on the table.
   Yes_____(1 point). No_____(1 point)

2. Active or passive involvement of preliminary survey with cABCDEF approach Yes____(1 point) No____

3. The paramedic field officer via radio phone pressurizes. Despite of this, awareness of the calm patient situation and that it is unfinished without decision-making. Yes_____(1 point) ____ No____

4. Eye contact, gesture, or verbalization of the continent of the home care folders: Verbalizing, which is the patients, recordings of dementia. Being part of joint situational awareness Yes____(1 point) No_____

5. Team performance flow meaning fluent working together Yes____ (1 point) No_____

Decision-making skills

1. One paramedic taking leadership and tasking to others in the team different work roles
   Yes____ (1 point) No _____

2. Taking appropriate equipment (monitoring, stretcher, keeping the patient warm, no double equipment as only one patient)
   Yes_____(1 point). No_____

3. Non-technical crew management (CRM) communication used
   Yes ____(1 point) No _____

   guidance to observing non-technical communication:
   -Not seen any CRM communication (cross: no)
   -A single closed loop confirmation of another team member's saying (cross: no)
   -Some closed loop confirmation of other team member's saying (cross: no)
   -Interactive closed-loop communication with eye contact and physical gesture (cross: yes)
   -Very interactive and systematically approached CRM communication involving verbally with this communication technic towards decision-making. (cross: yes)

4. Verbally or with physical gesture of being part of joint decision-making of team of two paramedic leaving the scene and two paramedics staying after joint consensus that there is not to become urgent unexpected change of the patient and field officer requesting an available ambulance to another scene.

Yes____(1 point) No____

5. Decision-making of leaving patient at home has been verbally or with a physical appropriate gesture
   Yes____(1 point). No____

Attachment 4

Observer form, simulation scenario 3

Observant study number:_____

Situational awareness

1. Environmental situational awareness by eye contact, physical gesture or verbalization. This is a trauma patient and a water rescue mission. Yes____(1 point) No_____

2. Active communication with the lake guard front rescue Yes_____(1 point) No_____

Guidance for the observer:

-No communication (Cross: No)
-A single gesture to communicate with the lake rescue guard (Cross: No)
-Some gesture to communicate with the lake rescue guard (Cross: No)
-A single gesture of response to suggestion of communication with the lake rescue guard (Cross:No)
-Clearly interactive communication with the lake rescue guard (Cross: Yes)
-Systematic interactive tactic planning and communication according to the patient situation that everyone takes part (Cross: Yes)

3. First response preparing or treatment in boat or the ambulance, which includes preparation or treatment of patient been kept warm, stabilization of a spine injured patient, all other necessary ambulance preparedness for transporting a trauma-patient (heating on, iv-lines etc.)
   Yes_____(1 point). No_____

4. Actively or passively Involved with preliminary survey with cABCDEF systematic approach
   Yes____(1 point) No_____

6. Team performance flow as fluent working together Yes____ (1 point) No_____

Decision-making

1. One paramedic taking leadership and tasking to others in the team different work roles. Decision-making done by who stays at the shoreside preparing the ambulance and who goes along with the lake rescue guard to the patient.
   Yes____ (1 point) No _____

2. Active or passive involvement by gestures of appropriate trauma patient equipment decision-making communication been done. Yes_____(1 point). No_____

3. Active communication via radiophone between paramedics on boat and on shoreside in the ambulance.
   Yes_____(1 point). No_____

Observer guidance:
-None (Cross: No)
-A single information without response communicated between the boat crew and the ambulance crew (Cross:No)
-Some information without response communicated between the boat crew and the ambulance crew (Cross: No)
- Interactive communication, but without decision-making of mutual plan (Cross: No)
-Interactive systematic communication with a decision-making according to mutual situational awareness.

4. Decision-making of treatment according to a spinal injury trauma-patient. Active verbal, passive physical gesture, and joint treatment with the result of immobilization of the spine and keeping the patient warm with blankets. Yes_____(1 point). No_____

5. Decisive decision-making of patient evacuation and transporting to the appropriate hospital after including consultation of a prehospital physician recommendation. Yes_____(1 point) No_____

Attachment 5

Simulation scenario 1

Target group:	Päijät-Häme wellbeing service county, prehospital physician and paramedics Control group (5+1) Intervention group (5+1)
aim of the simulation:	The meaning of the simulation is to investigate prehospital personnels' stress reactions and actions under pressure, teamworking, ability to keep situational awareness and decision making. This a part of a three simulation scenario set that belongs to the research "**Effectiveness of using pre-emptive resilience coaching program to enhance prehospital personnel work performance: a prospective randomized controlled pilot study."**
preliminary briefing:	For the study participant taking part in the simulation scenarios he or she is debriefed that they should conduct as being in a real patient case scene. Familiarizing with the equipment on hand and making sure that it functions properly. Checking out the VIRVE-radiofrequency channels are correct. The start point of the simulation is debriefed, reminder of being a part of this research and that the simulation will be a full scale scenario. The study participant should perform as they would in a real patient case. Participants receive pseudoanonyms.
Conducting the simulation:	FULL SCALE Location: Paraatikatu, apartment, Lahti, Finland Patient assignment: serious poisoning

	Prehospital care units: EPH 00, EPH 12X & EPH 12X If the paramedic unit asks for additional information: “Very vague situation. The caller was a man, he sounded calm. He has found his lady friend unconscious on the living room floor. It seems that the lady friend has taken alcohol, they have had an arguement and the caller man has visited the bar after the argument. He has been away for approximately two hours. Some pills may have been taken.” On the scene: A nice tidy apartment. Wine bottles on the kitchen counter, a baby crib and toys in the apartment. A young woman about 25 years old is laying on her stomach on the bed. (The respiratory rate is the actress’s own, periphery is also the actresses own). The man has covered his lady friend with a blanket. The man is calm at this point. (The man actress will be debriefed to be calm and friendly. From a separate sign via text-message he will change is nature) Vital signs: A: open B: respiratory rate is the actresses own, SpO2 91%, respiratory sounds are symmetrical and clear (actresses own), the lady friend patient is a bit snoring (if jaw lift is maneuvered the snoring will stop) C: RR 90/60 mmHg, heart rate 98 times/min, sinusrythm D: pupils are midsize and symmetrical, not so clearly reactive to light, the blood glucose is the actresses own. E: No signs of trauma. Temperature from the ear 37,2 degrees of Celsius. Treatment: Suspicion of bentsodiatzepine overdose looking at the patient and the surrounding empty medication packages. Iv-line

	Flumatsenile 0,2mg i.v. with repetition. On the second dose the patients begins to react, but does not react sufficiently. A second older person arrives to the scene (patient's father). He is anxious about the patient and blames the caller man. The door should be opened by the caller man unless the door was left open. The caller man and the older person start to argue. The caller man goes to the kitchen. When he comes back, he has a gun that bulges from his trousers. It can be seen clearly, but he does not take it to his hands. If the paramedics notices this threatening situation, the caller man shouts not to call the police.
Attention:	**Safety word to stop the simulation: Acute-repeat acute. Everyone shouts acute.** The simulation scenario can flow in its own sequencies, only the actors and actresses will be guided and the prehospital physician and prehospital personnel will be observed for research purpose.
Supplies:	Paramedic unit equipment X 2 Prehospital physician unit personal gear (clothes, work shoes, safety vests) iSimulate VIRVE x 8 (6 for trial subjects) Connection to Codea control → Dispatch message Prop: wine bottles, bentsodiatzepine packages, play gun, make-up (the intoxication patients is with sobby make up). Camera/ filmer Simulation instructor observers vest with sign marking the voluntary outsider defusing professional person
debriefing after the simulation:	After the simulation scenario a short debriefing if everyone is okay.

Attachment 6
Simulation scenario 2

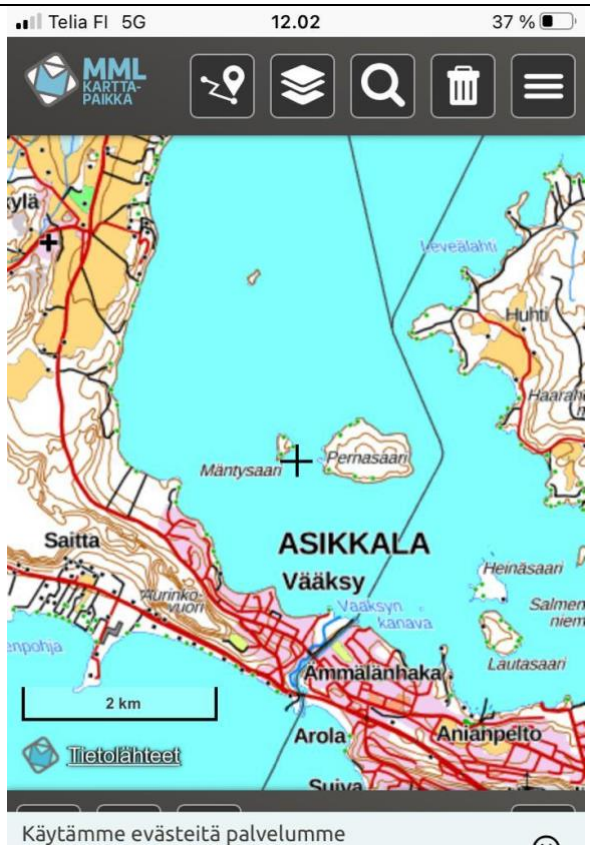
Target group:	Päijät-Häme well being service county, prehospital physician and paramedics Control group (5+1) Intervention group (5+1)
Aim of the simulation:	The meaning of the simulation is to investigate prehospital personnels' stress reactions and actions under pressure, teamworking, ability to keep situational awareness and decision making. This a part of a three simulation set that belongs to this research: **"Effectiveness of using pre-emptive resilience coaching program to enhance prehospital personnel work performance: a prospective randomized controlled pilot study."**
Preliminary debriefing:	For the study participants taking part in the simulation, he or she is debriefed that they should conduct as being in a real patient case scene. Familiarizing with the equipment on hand and making sure that it functions properly. Checking out the VIRVE-radiofrequency channels are correct. The start point of the simulation is debriefed, reminder of the being a part of this research and that the simulation will be a full-scale scenario. The study participants should perform as they would in a real patient case. Participant receive pseudoanonymous.
Conducting the simulation:	FULL SCALE Location: Sykekatu, apartment, Lahti, Finland. Dispatch code: acute severe abdominal pain Units: EPH 00, EPH 12X & EPH 12X

	If the paramedic unit asks for additional information: ”Elderly woman/man, who calls for help. He tells that an hour ago tarted a very severe abdominal pain that radiates to the back. He is home alone. He has opened the front door.” All the units arrive at the same time to the scene. At the scene: An elderly person lies on the sofa. He complains immediately of an undefined abdominal ache and he does not know how to describe the nature of the abdominal pain more specifically. With the pain scale, the patient gives 10/10. Vital signs: A: Open B: Respiratory rate is moderate. The person can talk long sentences. The auscultation sound of lungs are pure. SpO2 is what the actor has naturally. The respiratory rate is what the actor has naturally. C: The values that the actor has. Rad+/+ Fem +/+. The skin is as the actor has it. D: The actress’s conscious level and findings. E: Complains pain in big gestures overestimating it. The pain localizes to the lower abdomen and radiates to the backside. The back feels pain (if percussed) Treatment: Excluding serious causes of abdominal pain. Decision-making: One unit case. Who leads the scene? How is the lead distributed to the paramedic unit? Decision making: is this a critically ill patient or not?
Attention:	**Safety word to stop the simulation: Acute-repeat acute. Everyone shouts acute.** The simulation scenario can flow in its own sequencies, only the actors and actresses will be guided and the prehospital physician and

	prehospital personnel will be observed for research purpose.
supplies:	Paramedic unit equipment X 2 Prehospital physician unit Personal gear (clothes, work shoes, vests) iSimulate VIRVE x 8 (6 for trial subjects) Connection to Codea control → Dispatch message Prop: Camera/ filmer Simulation instructor observers vest with sign marking the voluntary outsider defusing professional person
debriefing after the simulation:	After the simulation scenario a short debriefing if everyone is okay.

Attachment 7
Simulation scenario 3

Target group:	Päijät-Häme well being service county, prehospital physician and paramedics Control group (5+1) Intervention group (5+1)
Aim of the simulation:	The meaning of the simulation is to investigate prehospital personnel stress reactions and actions under pressure, teamworking, ability to keep situational awareness and decision making. This a part of a three simulation set that belongs to this research ”**Effectiveness of using pre-emptive resilience coaching program to enhance prehospital personnel work performance: a prospective randomized controlled pilot study.”**
Preliminary debriefing:	For the study participants taking part in the simulation he or she is debriefed that they should conduct as being in a real patient case scene. Familiarizing with the equipment on hand and making sure that it functions properly. Checking out the VIRVE-radiofrequency channels are correct. The start point of the simulation is debriefed, reminder of being part of this research and that the simulation will be a full scale scenario. The study participants should perform as they would in a real patient case. Participant research numbers Attention! wetsuit = patient’s skin
Conducting the simulation:	FULL SCALE Location: Asikkala



Dispatch code: A221, water vehicle accident, small

Units: EPH 00, EPH 225 EPH 226 + lake rescue VPH108

A water scooter has collided with an underwater rock. The driver has been thrown into the water. A distant fisherman has seen the accident and is calling help (112). He does not have the opportunity move closer.

If the paramedic unit asks additional information:

“Distantly seen and heard a water scooter crash into a under water rock. The driver has flown in an arch into the water. The caller is far away and can’t move closer to see in more detail.”

”The region’s fire department is occupied with another assignment in Vierumäki. As well the more remote fire department rescue team unit 201 is also occupied.”

EPH00 ja EPH225 have just signed out from another assignment in Asikkala (X-5) and EPH226 is just transporting back to their base near the scene. The local lake rescue is traveling by boat in the area.

	The lake rescue suggests they can pick the paramedics onboard from the near by harbour "Majakka". On the scene: A man is in the water. Vital signs: A: Open B: Respiratory rate is elevated 25-30 times/minute. The patient can talk sentences. SpO2 with a bad curveline 93-95%, lung auscultation is pure on both sides. C: The perifery is cold due to being in the water. Blood pressure is 186/98 mmHg and heart rate is 110 times/minute. D: Oriented, but his consciousness fluctuates. In the boat the patient loses consciousness intermittently. However, he is easily waked up. No differences with pupils. Mimic is symmetrical. Neurologically hand shaking is symmetrical. The lower limbs don't move voluntarily or react in any way. Numbness from waist down. Blood glucose is 6,3 mmol/l. alcohol is promilles 0.89. E: The thorax is stabile, the abdomen is soft and not distended. The scull on the right has a bruise. The patients complains of headache. The upper limbs function properly. The lower limbs are not functioning. Ear temperature 33.2 degrees of Celsius. Treatment: Transport from water to boat? Emergency transport? Keeping the patient warm. usage of prehospital trauma team protocol process.
Attention:	**Safety word to stop the simulation: Acute-repeat acute. Everyone shouts acute.** The simulation scenario can flow in its own sequencies, only the actors and actresses will be guided and the prehospital physician and prehospital personnel will be observed for research purpose.
Supplies:	Paramedic unit equipment X 2

	Prehospital physician unit Personal gear (clothes, work shoes, vests) iSimulate VIRVE x 8 (6 for trial subjects) Connection to Codea control → Dispatch message Prop: Camera/ filmer Simulation instructor observers vest with sign marking the voluntary outsider defusing professional person
debriefing after the simulation:	After the simulation scenario a short debriefing if everyone is okay.