Assessment of an acute prehospital breathing difficulty scale

Tim Alex Lindskou1, Ulla Møller Weinrich2, Birgitte Schantz Laursen3, Erika Frischknecht Christensen1

1 Centre for Prehospital and Emergency Research, Department of Clinical Medicine, Aalborg University, Aalborg, Denmark. 2 Department of Respiratory Diseases, Aalborg University Hospital, Aalborg, Denmark. 3 Department of Clinical Medicine, Aalborg University, Aalborg, Denmark

AIM
To assess ambulance patients perceived breathing difficulties. Furthermore to assess the use of a verbal numerical rating scale (VNRS) for breathing difficulty assessment in the ambulances.

METHOD
Ambulance professionals asked patients to assess their degree of breathing difficulty two times; at first and last contact with the patient. Patients received otherwise standard care in the ambulances. North Denmark Region patients over the age of 18 were included in the period 1 July 2017 – 31 January 2019.

RESULT
Included 1,576 patients. 1,184 (74 %) had an initial VNRS median score of 8 (interquartile range 6-9) which decreased to 4 (2-5) before leaving the ambulance. For 272 (17 %) the VNRS score was unchanged, it increased for 40 (3 %), and could not be used by 95 (6 %).

CONCLUSION
Patients experience an initial high level of breathing difficulty in the ambulances, that however improve for the majority. The VNRS appears usable in the prehospital setting and may aid personal in knowing whether a patient’s condition is improving. Future research investigating potential correlation between the VNRS score, vital signs, and patient outcome are planned.

On a scale from 0 to 10, where 0 is no difficulties breathing at all and 10 is the worst possible breathlessness imaginable, how are you experiencing your breathing now?