Simply eyeballing patients may trump formal assessment for prioritising seriously ill

It better predicts those most at risk of death in emergency care, study shows

Simply eyeballing a patient may be more effective than using a formal structured assessment (algorithm) to prioritise those who are the sickest and therefore most in need of urgent medical care, finds research published online in **Emergency Medicine Journal.**

A basic clinical assessment seems to better predict those most at risk of death, even in the hands of healthcare professionals with relatively little emergency care experience, such as phlebotomists and medical students, the findings indicate.

A linked editorial by the journal's editor suggests that it may now be time to revise how emergency care patients are stratified (triaged) in an era of rising demand and insufficient resource.

The researchers base their findings on a comparison of the triage decisions made by experienced nurses and phlebotomists and medical students to prioritise 6383 patients seeking treatment at one emergency care department over a period of three months.

The nurses used an established algorithm known as the Danish Emergency Process Triage, or DEPT for short, to decide which patients were the sickest; the phlebotomists and medical students made their decisions by simply looking at each patient.

Both approaches categorised need from blue (minor injuries/conditions) up to red (most urgent). And both were compared for their ability to assess the likelihood of death within 30 days.

The researchers also looked at any associations between triage method and death within 48 hours, and how often both methods reached the same decisions for the same patients.

In all, 6290 patients were assessed using both methods. It was rare for both methods to arrive at the same decisions for the same patients.

And when the ability to assess the likelihood of death within 48 hours and 30 days was compared, simply eyeballing the patient was more accurate than structured triage.

This is an observational study, and as such, can't establish cause. And in a linked editorial, Dr Ellen Weber, University of California, San Francisco, cautions that the study was carried out in only one emergency care department, and with a triage system that is not widely used internationally.

"Yet the study should make us rethink our current process and the evidence behind it," she insists.

Whichever form of structured triage is used, it forces experienced nurses to follow an algorithm rather than use their considerable experience and clinical judgment, says Dr Weber.

And while sorting the very sick from those with minor ailments, structured triage doesn't distinguish those with troubling conditions that may become much more serious from patients who may need some fluids and who can then be discharged, she points out.

"Like a saggy bed, too many patients fall to the centre," she writes, adding: "In short, we have adopted complex systems that take up the time of highly qualified nurses, potentially delay care, to create what is probably, at best a *'meh'* result."

She concludes: "We need to ask ourselves in these days of rising medical costs and rising patient numbers if we can afford to continue doing it the way we have always done it if we can do it just as well or better a simpler way."

Research: A simple clinical assessment is superior to systematic triage in prediction of mortality in the emergency department doi 10.1136/emermed-2016-206382

Editorial: Triage: making the simple complex? doi 10.1136/emermed-2018-207659
Journal: *Emergency Medicine Journal*

Author contacts
Research
Dr Kasper Iversen, Department of Cardiology, Herlev Hospital, Copenhagen, Denmark
Tel: +45 28712753
Email kasper.k.iversen@gmail.com
Or
Dr Anne Kristine Servais Iversen, Department of Obstetrics and Gynaecology, Rigshospitalet, Copenhagen, Denmark
Tel: + 45 267 09323
Email: annekristine89@gmail.com
Editorial
Dr Ellen Weber (Editor), Department of Emergency Medicine, UCSF, San Francisco, USA
Tel: + 1 415 860 0771
Email: ellen.weber@ucsf.edu