

PostScript

LETTERS

Doctors and prehospital on-scene times: effect is still debatable

The article by Dissmann and Le Clerc¹ is a welcome addition to the prehospital literature. However, it is important to remind readers that the observation that doctors do not prolong prehospital on-scene times within their system is simply that: an observation.

All observational studies are influenced by bias, confounding and the play of chance, and in this study there were a number of confounding variables that could have significantly influenced scene times. These include severity of injury, degree of entrapment, resources at scene, interventions before arrival of the helicopter, and the training and experience of the helicopter crew. Without robust case mix adjustment, the true effect of the presence of a doctor on the "on-scene time" cannot be properly established. The validity of the conclusion is therefore in doubt.

There is also the possibility of bias regarding the types of calls that the doctor and the paramedic teams attended. From the data presented, it is not possible to say that the casualties they attended were comparable. Furthermore, most of the doctor-attended casualties seem to have required little or no intervention in addition to that provided by paramedics, so are unlikely to have remained on scene for long. With no information regarding how the outcome measure (on-scene time) was derived or validated, it is possible that significant bias was again introduced, especially if these times were accepted only from written report forms.

In summary, the study explores a clinically relevant area of prehospital care especially since reduced on-scene times influence the outcome for patients.² However, whether doctor-delivered advanced life support in the prehospital phase influences on-scene time is still debatable.³⁻⁶ Of course, the ultimate measure of the effectiveness of any prehospital critical care and retrieval system must be the outcome for patients. We need to know whether prognosis is affected by the presence of a prehospital critical care team (doctor or non-doctor based) and, in that context, the influence of prehospital time. Dissmann and Le Clerc have opened the debate: let us now develop collaborative research proposals to answer these questions.

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References

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- 2 Feero S, Hedges JR, Simmons E, et al. Does out-of-hospital time affect trauma survival? *Am J Emerg Med* 1995;13:133-5.
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- 4 Garner A, Rashford S, Lee A, et al. Addition of physicians to paramedic helicopter services decreases blunt trauma mortality. *Aust NZ J Surg* 1999;69:679-701.
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Author's response

We welcome the stimulating comments of Quinn *et al*¹ in response to our previously published paper. We recognise that the topic breached here is both an emotive one and also very subjective.

It is extremely difficult to conduct a direct comparison of paramedic-led versus physician-led performance on exactly the same case, other than through moulage scenarios. No two prehospital care missions are ever the same, and we agree with Quinn *et al* that there is a multitude of confounding factors, many of which are beyond being controlled for. Therefore, we believe that the situation at the Great North Air Ambulance was unique in trying to address these issues as virtually all controllable confounders (equipment, crew number, mission case mix) were actually matched for both groups (other than entrappings). We also recognise that our study was not powered to look at some of the main issues, as sample sizes in excess of 2000 cases would have been required, clearly exceeding the annual flight mission numbers of virtually any helicopter emergency medical service provider in the UK.

But apart from all that, attendance time is only one performance indicator in prehospital

medicine, and in our opinion is of less importance than the quality of care delivered at the roadside and, of course, ultimate patient outcome.

We agree with Quinn *et al* that observational studies are what they say: observation, and are therefore of a rather low evidence level. But observations do one thing very well: they spark ideas for further research.

Finally, we welcome Quinn *et al*'s call for well-formulated, structured and collaborative research proposals to address the issues surrounding physician-delivered prehospital care in the UK.

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Reference

- 1 Quinn LM, French J, Mackenzie R. Doctors and prehospital on-scene times: effect is still debatable. *Emerg Med J* 2007;24:521.

CORRECTIONS

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In the Best evidence topic report titled, Chlorpromazine in Migraine, in the April issue of *EMJ* (2007;24:297-300) the surname of the reporter has been incorrectly spelt. The correct spelling is Peter Logan, who also works at the Royal Brisbane & Women's Hospital in Queensland, Australia. The journal apologises for this error.

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In the paper titled, Deep vein thrombosis among injecting drug users in Sheffield (*Emerg Med J* 2006;23:777-9), the corresponding email address is incorrect. The correct address is vic.cooke@sth.nhs.uk. The journal apologises for this error.

In the May issue of *EMJ*, Sophia was attributed to the wrong person. The May Sophia (*Emerg Med J* 2007;24:374) was coordinated by Tanya Baron and Jonathan Wyatt. The journal apologises for this error.