

corded as taking a pulse or not (or was the narrower definition of rate counting the only acceptable method)? When an EKG monitor was attached furnishing a rate and a pulse palpated for palpable presence and quality, was this considered to represent taking a pulse by these untrained observers? If a pulse is palpated for quality the rate can reliably be established from the EKG monitor.

How many of these patients were in asystole or unresponsive with another pulseless rhythm? If a functional rhythm and palpable pulse were not achieved pre-hospital—is a lack of taking a blood pressure a serious omission or a saving of critical time?

How many were critical, multisystems trauma patients? What was their distance from a trauma center? Were pulse rates and blood pressure estimated by other methods at the scene and, then quantified more accurately enroute by taking the blood pressure by palpation. If this occurred, did the untrained observer understand that blood pressure had been evaluated in the field (even though not quantified) and, since no stethoscope is used with the palpation method, it had been taken quantitatively in the ambulance. In multisystems trauma patients, such a practice is desirable in order to avoid unnecessary delay in the field (per PHTLS and BTLS courses).

If a patient (or parent of a minor child) is of sound mind and not injured or ill so as to potentially affect their mental ability, it is their right to refuse treatment, if after being warned of the potential danger, a patient continues to refuse treatment it is not “an omission” to not obtain vital signs. How many patients refused treatment prior to the taking of the blood pressure and/or pulse? For how many children included in the study, did a parent refuse treatment?

How many infants and small children were in full cardiac or respiratory arrest? How close to the hospital were they? How many responders were on the crew? In such cases, the furnishing of CPR, intubation, and providing ventilation enroute may have represented a required set of priorities allowing only for pulse palpation and EKG monitoring, but not allowing time for quantitative measurement of pulse rate and blood pressure. In such cases, this could be reasonable and not constitute a glaring omission.

In how many pediatric patients was a pulse counted by auscultation of the apical pulse? Was this recognized by the

untrained observer as “taking a pulse”? How many of the pediatric patients were infants or small children with URIs, low fevers, febrile seizures, or other illness not involving trauma? In many areas, in the case of small children whose overt signs are good, LOC is good, and no other indication of hemorrhage or injury exist (such as tachypnea or tachycardia), if the child is frightened or combative, a policy exists to defer the taking of a quantitative blood pressure pre-hospital in order not to agitate the child. Although one can argue the merit and dangers of such a policy, was such a policy either in the pediatric protocols or a commonly accepted (and physician approved) practice?

Conclusions

Until these and similar questions are answered, the study is very inconclusive and certainly the reader cannot properly conclude that a frightening lack occurred in the quality of the assessment, the EMT's assessment skills, training, and quality control mechanisms. Based upon the published study and its method, such a broad-based condemnation is unfounded.

However, the subject warrants additional study. Hopefully, others will attempt to duplicate the study. For the study to have meaning, qualified medical personnel who know and can recognize various assessment skills (ie: EKG monitors give quantitative pulse, etc.) should be used rather than unqualified individuals. Also, more attention should be paid to reporting such cases as the omission of pulse counting with a watch and blood pressure by sphygmomanometer are not warranted (such as refusals and patients in arrest, etc.).

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A Prospective Evaluation of Prehospital Patient Assessment by Direct In-Field Observations: Failure of ALS Personnel to Measure Vital Signs

To the Editor:

I read with interest the article entitled “A Prospective Evaluation of Prehospital Patient Assessment by Direct In-Field Observations: Failure of ALS Personnel to Measure Vital Signs” by Spate et al in the October-December 1990 issue of *Prehospital and Disaster Medicine*.

The paper has a number of flaws which I believe to be counterproductive to publication in your journal. This is a terrible mixture of apples, oranges, grapefruits, and pears. Trauma patients apparently were lumped with medical patients. There was such an article out of South Carolina years ago that has been quoted many times as demonstrating that it takes more than 15 minutes to start IVs in the field. That study lumped trauma patients and medical patients producing an outcome that was incorrect. This paper has done it also.

Patients were not stratified according to the severity of illness based on either ISS or trauma score, nor were any type of medical evaluation tools used for a non-trauma patient. No consideration has been taken into account regarding the condition of the patient.

This article has mixed cardiac patients with patients of other types; patients whose injuries resulted from penetrating trauma with blunt trauma. Head injuries are mixed with abdominal injuries.

The authors have identified that blood pressure was omitted in 21.9% of the patients transported Code 3. They neglect to identify what was the cause of the Code 3 transportation.

As I am sure the authors are aware in the ATLS, PHTLS, and BTLS courses, EMTs are admonished to make a decision at the completion of the primary survey as to whether the patient requires rapid transportation to the hospital. If such rapid transportation is required, one may never get to check on the blood pressure, since it is in the secondary survey. The patient may well be packaged and transported. Certainly, there are other methods of evaluating severity of injury such as level of consciousness, eye signs, capillary refill, presence of pulse that is a risk (rate unimportant), and many other conditions when the EMT would not want to waste time checking the blood pressure when there are many other things to be done to salvage the patient and when the patients condition easily can be followed by other means.

It well may be that prehospital care is well below standards in the state of Arizona and that improvements need to be made. Unfortunately, there is nothing in this article that answers the question.

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