



# RAPTOR AND THE IMPORTANCE OF TRAFFIC ACCIDENTS

## RAPTOR Y LA IMPORTANCIA DE ACCIDENTES DE TRÁNSITO

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### Mr. Editor of the Revista de la Facultad de Medicina Humana, Lima, Peru

I am writing to you in relation to the review article "Association between the time of pre-hospital care and hospital mortality in victims of traffic accidents" published in 2020 Volume 20, number 01. In the aforementioned work, by M.J.G. Fernandez Sandoval et al., highlight the existence of a significant association between the time of prehospital care and mortality, with which I agree and express that it is of vital importance, even a good level of prehospital education can be applied in the specific topic of traffic accidents since it represents an important health problem and is a priority in research<sup>(1)</sup>.

Worldwide, traffic accidents annually cause the death of approximately 1.3 million people<sup>2</sup>, which is why countries such as Europe and some parts of the United States have implemented basic and advanced prehospital care training systems for the personnel closest to attending to the patient at the scene of the accident such as the RAPTOR course (see table 1) which are resuscitation complements (prehospital transfusion and endovascular aortic resuscitation balloon - REBOA)<sup>(3,4)</sup> and the implementation of triage to evaluate serious to minor injuries for transfer to a level health center specialized in traumas to reduce the high mortality.

In Peru, in the department of Lima until 2019, according to the INEI, it is the one with the highest cases of fatal traffic accidents<sup>(5)</sup>. It is important to note that the "annual global cost is close to US \$518 billion<sup>(6)</sup>". In 2020, a review was carried out on the association of prehospital care time and mortality in victims of traffic accidents, where they found that "Prehospital care time in traffic accidents is significantly associated with hospital mortality of patients due to the need for early stabilization of the patient's condition"<sup>(6)</sup>.

Nevertheless, as in other studies<sup>(7)</sup>, time is not the only influential factor. They are the distance to a care center, the level of the care center, the severity of the injuries, hemodynamic instability, patient extraction, and the correct use of tools to improve care at the first moment of contact with the patient.

In Peru, there is an emergency medical service that consists of 3 levels of care: community, pre-hospital Emergency Mobile Care System (SAMU), and hospital<sup>(7)</sup>. SAMU, an initiative that tries to reduce mortality in emergencies such as traffic accidents or occasions that threaten life, with expectations of success in our environment that need evaluation, supervision and measurement measures to see the progress of this system.

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Lastly, it would be ideal for teaching the RAPTOR system and basic tools for prehospital care from the undergraduate level and to health personnel for more specialized care in trauma cases.

**Table 1.** RAPTOR Course (Advanced Resuscitation Care)

BENEFITS		
RAPTOR Course (Advanced Resuscitation Care)		SAMU
REBOA	PREHOSPITAL TRANSFUSION	
Temporarily stops a non-compressible hemorrhage from the torso, by means of an endovascular resuscitation balloon that enters through the femoral vein, which is inflated above the point of bleeding	Replenishes fluids lost due to hemorrhages in accidents. Recommended in proportions of 1:1:1 plasma, platelet, and globular packet	Decreases prehospital care times. equipped and more disaster training.

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