

Effectiveness of chest compressions skill training in the prone position: comparison of two methods

E. Peixoto¹, R.E.A. Batista¹, M.F.P. Okuno¹, R.C.N. Baptista², C.R.V. Campanharo¹, J.L. Lopes¹

¹Federal University of Sao Paulo (UNIFESP), Paulista School of Nursing, São Paulo, SP, Brazil., Sao Paulo, Brazil.; ²Nursing School of Coimbra, Coimbra, Portugal

Funding Acknowledgement: Type of funding sources: Public Institution(s). Main funding source(s): Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES)

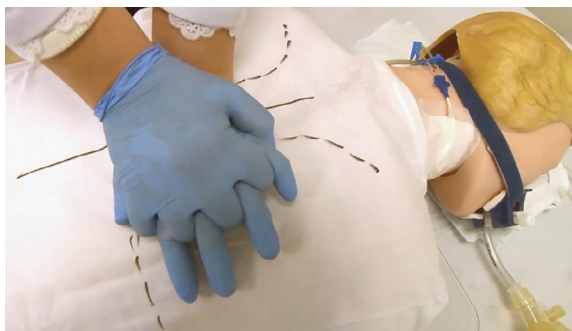
Introduction: The current pandemic caused by the new coronavirus (COVID-19), has become challenging for the health system.¹ Pulmonary complication take patients to require ventilatory support and one of the interventions performed to improve then oxygenation is the prone position.² In view of the current reality of patients with COVID-19 in a prone position, it is necessary to train cardiopulmonary resuscitation in this position.³ Purpose: To compare the effectiveness of two training methods, video and self-instructional guide, in the ability of chest compressions in prone position.

Methods: This is a randomized clinical trial. The sample consisted of nurses, nursing technicians, physiotherapists and residents of the intensive care and emergency unit of a public hospital. Randomization was performed in blocks of four using the Random @ system. Group 1 (G1) consisted of professionals who watched a validated video while practicing chest compression on a low-fidelity mannequin placed in the prone position. Group 2 (G2) consisted of professionals who practiced compression guided by a previously validated self-instructional guide. The study's out-

come was the performance of chest compressions skills assessed before and after interventions, using a previously validated instrument. The study was approved by the Research Ethics Committee (no. 4.016.959).

Results: Ninety-one professionals participated in the study (45 from group 1 and 46 from group 2). It was observed that there was an improvement in hand positioning (G1 pre: 16 professionals correctly and post: 31 (p0.001); G2 pre: 20 correct and post: 20 (p0.781), of body positioning (G1 pre: 32 professionals hit and post: 41; G2 pre: 32 hit and post: 39) and the frequency of compressions G1 pre: 10 professionals hit and post: 19 (p0.017); G2 pre: 13 hit and post: 16 (p0.363)) after the interventions. Statistically, when applying the test within each group, a p-value of 0.0003 was obtained in G1 (video) and 0.512 in G2 (self-instructional guide). Thus, we can infer that only group 1 (video) had a change when we compared the two moments.

Conclusion: The video associated with simulation was more effective than the self-instructional guide and can be used as an attractive and dynamic teaching tool.



CPR in prone position