

Kneeling posture impacts chest compressions' effectiveness

October 17 2017



(HealthDay)—During cardiopulmonary resuscitation (CPR) performed

by males, self-adjusted and nearest kneeling postures are more effective for chest compression, with lower perceived exertion, according to a study published online Oct. 5 in the *Journal of Clinical Nursing*.

S.H. Ho, from The Hong Kong Polytechnic University and Daniel H.K. Chow, Ph.D., from The Education University of Hong Kong, applied a self-controlled repeated-measures design to examine the impact of kneeling [posture](#) on chest compression during CPR in males. The authors recruited 18 participants with a qualified first-aid certificate. Each participant performed three sessions of CPR on a mannequin using one of three kneeling postures (farthest, self-adjusted, and nearest) in each. Each session comprised five CPR cycles (30 strokes of chest compression within 18 seconds) in each kneeling posture and lasted two minutes.

The researchers found that the efficacy of chest compression was significantly better in the self-adjusted and nearest kneeling postures than in the farthest posture. Similar effect was seen for the self-adjusted and nearest postures, while because of the lower rate of perceived exertion, most participants preferred self-adjusted kneeling posture.

"The use of the self-adjusted and nearest kneeling postures during CPR in males resulted in more effective chest compression with lower perceived exertion," the authors write. "Both these positions can be objectively recommended to enhance the efficiency of [chest compression](#) and thereby increase the cardiac arrest survival rate."

More information: [Abstract](#)
[Full Text \(subscription or payment may be required\)](#)

Copyright © 2017 [HealthDay](#). All rights reserved.

Citation: Kneeling posture impacts chest compressions' effectiveness (2017, October 17)
retrieved 4 May 2024 from

<https://medicalxpress.com/news/2017-10-posture-impacts-chest-compressions-effectiveness.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.