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Letter to the Editor

Don't call it “massage”! The importance of words during dispatcher-assisted cardiopulmonary resuscitation



To the Editor,

Many times in our lifetime we were faced with the consequences of having used the wrong word. Other times, however, the correct word has been misinterpreted; understanding the real meaning of words can become even more complex when conversations are held in stressful situations. Moreover, telephone communications, where the interlocutors cannot mutually see gestures and non-verbal language, arise further obstacles to clear comprehension. All these aspects should be considered when dispatchers provide pre-arrival instructions to bystanders in case of an out-of-hospital cardiac arrest (OHCA) during emergency calls.¹

Recently, an old woman called the emergency medical dispatch centre (EMDC) for her husband who was suspected of being under cardiac arrest by the call taker and, therefore, dispatcher-assisted cardiopulmonary resuscitation (DA-CPR) instructions were given. The woman was told to perform “cardiac massage” by placing her hands in the middle of the husband’s chest up to the ambulance arrival. The nurse kept the woman on the phone, and once the ambulance crew arrived on the scene, they found the patient’s wife rubbing the husband’s chest.

Although anecdotal and referred to a time when videocalls were still not implemented by EMDCs,² this report emphasizes the importance of using specific terms that are not at risk of being misunderstood when EMDC dispatchers provide first aid instructions. DA-CPR represents an effective approach to strengthen the chain of survival, increasing bystander CPR rate and reducing the time to first chest compression.¹ DA-CPR is reported to improve survival from OHCA and is associated with better neurological outcomes.² Language impacts the processing of emergency calls (Table 1) and effective communication is crucial to obtaining caller agreement to perform DA-CPR^{3–6}; consequently, EMDC dispatchers should implement communication strategies to overcome psychological and physical barriers to bystander-CPR.⁴ DA-CPR is a situation where ‘less is more’⁶: an OHCA represents a stressful event for a layperson, and providing an excessive quantity of instructions to perform a complex procedure may have a paradoxical effect, confusing the bystander and delaying resuscitation.⁶

More than 60% of OHCA occur at home where elderly people are frequently the first witnesses and potential CPR providers.⁶ Pre-

vious studies reported difficulties experienced by older lay people in understanding dispatcher’s instructions and performing CPR, due to physical limitations or fatigue.^{7,8} Older people may also find it hard to activate speakers or videocalls in new generation smartphones⁹; DA-CPR protocols and dispatcher’s training and experience should overcome these barriers.

Although used for many years and somewhat related to a traditional approach in teaching CPR, the terms “heart and cardiac massage” are at high risk of conveying a distorted message of a soft and gentle movement. DA-CPR should avoid these terms in favor of “chest compressions”, which are better suited to explain the manoeuvres to be performed. A clear and easy message, like “check, call and compress” as suggested by the World Restart a Heart Campaign, could increase bystander’s CPR engagement, enhancing effective cooperation between EMDC dispatchers and the public.¹⁰

Author contributions

All authors made a significant contribution to the conception, study design, execution, acquisition of data, analysis, and interpretation of data. All authors took part in drafting and critically reviewing this letter; gave final approval of the version to be published; have agreed to submit it to the current journal; and agreed to be responsible for all aspects of the work.

Ethics

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Table 1 – Summary of main findings of studies investigating linguistic choices during dispatcher-assisted cardiopulmonary resuscitation.

Study	Journal	Main findings
Mirza et al. (2008)	Resuscitation	<ul style="list-style-type: none"> Instructions to “push as hard as you can” are superior to “push down firmly 2 inches (5 cm)” in achieving improvement in chest compression depth
Riou et al. (2018)	Resuscitation	<ul style="list-style-type: none"> High variability in the language used to initiate DA-CPR Association between the language used by dispatchers in CPR-openings and caller agreement to perform CPR Talking in terms of futurity (“we’re going to do CPR”) appeared to be a highly successful way to phrase the CPR-opening (97% agreement)
Trethewey et al. (2019)	Resuscitation	<ul style="list-style-type: none"> The use of ‘hard and fast’ terminology was superior to both ‘at least 5 cm’ and ‘approximately 5 cm’, in delivering the highest quality chest compressions, in terms of chest compressions depth, chest compression rate and delivery of high-quality compressions
Leong et al. (2021)	Singapore Med J	<ul style="list-style-type: none"> The phrase “push hard and fast” was associated with a faster time to first compression and shorter interval between instruction and compression

CPR, cardiopulmonary resuscitation; DA-CPR, dispatcher-assisted cardiopulmonary resuscitation.

Disclosure

The authors declare no conflicts of interest.

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