

BU's service-learning initiative to teach hands-only CPR to high school students is successful

January 4 2019

PumpStart, a community service-learning program created by students at Boston University School of Medicine (BUSM), that teaches hands-only CPR to the general public, is effective for both teaching high school students a life-saving skill and providing medical students with an opportunity to engage in public health and medical education.

It is estimated that 600,000 people die from [cardiac arrest](#) at home each year. Predictably, the survival rate for out-of-hospital cardiac arrests are much lower than those that occur at in-hospital setting.

High school students throughout the metro-Boston area who participated in the PumpStart program completed anonymous pre-/post surveys. The pre-surveys were administered prior to their viewing a 60-minute training session on hands-only CPR in addition to receiving hands-on, small group practice time run by BUSM students. The post survey was administered after the training session. Medical students also completed surveys assessing their comfort in teaching CPR both before and after participation.

The high school students reported significant improvements in CPR technique and confidence in acquired skills following their completion of PumpStart. The medical students reported significantly higher confidence levels regarding abilities to answer questions about CPR, serving as mentors and facilitating training sessions for new medical

students after participating in PumpStart.

"Getting the general public to feel comfortable performing bystander CPR is vital to overall improved survival from cardiac arrest events," explained Anita Knopov, a fourth-year medical [student](#) at BUSM who co-authored the study. "Harnessing educational resources provided by a major urban medical center and offering training to inner-city [high school students](#) allows [medical students](#) to serve as both educators and mentors within the community, while generating interest for high school youths into a career in the healthcare profession."

Knopov believes PumpStart can serve as a model for other organizations and can have a long-term public health impact as bystander CPR continues to be a predominant predictor in out of hospital cardiac arrest survival. "Although PumpStart is offered only in Boston, we hope that our work will stimulate the development of similar programs in other regions."

These findings appear in the *Journal of Education*.

More information: Nikita S. Kalluri et al, A Service-Learning Initiative to Teach Hands-Only CPR to High School Students: PumpStart, *Journal of Education* (2018). [DOI: 10.1177/0022057418818817](#)

Provided by Boston University School of Medicine

Citation: BU's service-learning initiative to teach hands-only CPR to high school students is successful (2019, January 4) retrieved 2 May 2024 from <https://medicalxpress.com/news/2019-01-bu-service-learning-hands-only-cpr-high.html>

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