

**Editor's note:** *Annals* has partnered with a small group of selected journals of international emergency medicine societies to share from each a highlighted research study, as selected monthly by their editors. Our goals are to increase awareness of our readership to research developments in the international emergency medicine literature, promote collaboration among the selected international emergency medicine journals, and support the improvement of emergency medicine world-wide, as described in the WAME statement at <http://www.wame.org/about/policy-statements#Promoting%20Global%20Health>. Abstracts are reproduced as published in the respective participating journals, and are not peer reviewed or edited by *Annals*.

## African Journal of Emergency Medicine

[afjem.com](http://afjem.com)

*Official Journal of the African Federation for Emergency Medicine, the Emergency Medicine Association of Tanzania, the Emergency Medicine Society of South Africa, the Egyptian Society of Emergency Medicine, the Libyan Emergency Medicine Association, the Ethiopian Society of Emergency Medicine Professionals, the Sudanese Emergency Medicine Society, the Society of Emergency Medicine Practitioners of Nigeria and the Rwanda Emergency Care Association*

### Implementation and evaluation of an innovative leadership and teacher training program for non-physician emergency medicine practitioners in Uganda

Colella M, Bisanzo M, Farquhar C, Nambaziira R, Carter E, Gimbel S, O'Malley G. Implementation and evaluation of an innovative leadership and teacher training program for non-physician emergency medicine practitioners in Uganda. *Afr J Emerg Med.* 2019;9:25-29.

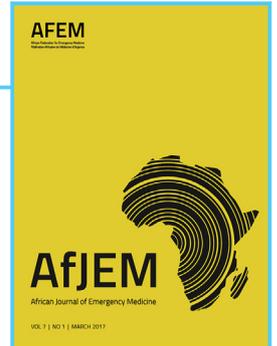
**Introduction:** Leadership and teaching skills are essential, but not often emphasized, components of medical training. As emergency care develops as a specialty in Uganda, two cadres of providers are being trained: physicians and non-physician clinicians (NPCs). Building formal leadership and educator training into these curricula is essential.

**Methods:** A week long continuing education (CE) course on leadership and teaching is described and evaluated for effectiveness using Kirkpatrick's framework for learner-centred outcomes. The emergency care trained NPCs participated in a week-long course consisting of lectures, role-playing, and small group discussions, as well as a personality self-assessment. The evaluation process consisted of: 1) an immediate post-course survey to measure learner satisfaction, 2) a retrospective, pre/post self-assessment with a Likert-type scoring tool to measure knowledge gains, and 3) a three-month follow up survey and structured interviews to measure knowledge retention and behaviour change in practice.

**Results:** All 15 NPCs participated in the evaluation process. Learner satisfaction was high with an average score of 9.3 (on a 1–10 scale) for course content, amount learned, and use of time. Participants reported gains in knowledge for each of the 24 competencies measured, with an average difference in pre- and post-course Likert scores of 1.11 (on a scale of 1–5). Lastly, all 15 participants shared detailed examples of using course content in practice three months after the course finished. The most frequently mentioned themes were “giving and receiving feedback,” “delegating and assigning tasks,” and “communication.”

**Conclusion:** This course was a successful CE intervention in this setting as measured by Kirkpatrick's framework. The most frequently mentioned concepts used in practice point to the NPCs ability to take on leadership roles in this setting. Further research and evaluation methods should focus on the influence of culture and personalities on leadership education and translation into practice in an EM setting.

Reproduced with permission.



Canadian Journal of Emergency Medicine

caep.ca/resources/cjem

Official Journal of the Canadian Association of Emergency Physicians

Hair cannabinoid concentrations in emergency patients with cannabis hyperemesis syndrome

Albert K, Sivilotti MLA, Gareri J, Day A, Ruberto AJ, Hookey LC. Hair cannabinoid concentrations in emergency patients with cannabis hyperemesis syndrome. *CJEM*. 2019; <http://doi.org/10.1017/cem.2018.479>.

**Objective:** Cannabis hyperemesis syndrome is characterized by bouts of protracted vomiting in regular users of cannabis. We wondered whether this poorly understood condition is idiosyncratic, like motion sickness or hyperemesis gravidarum, or the predictable dose-response effect of prolonged heavy use.

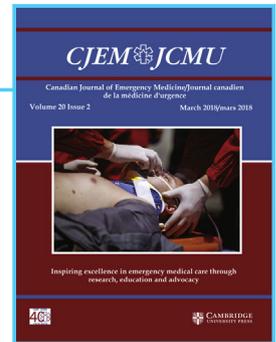
**Methods:** Adults with an emergency department visit diagnosed as cannabis hyperemesis syndrome, near-daily use of cannabis for ≥6 months, and ≥2 episodes of severe vomiting in the previous year were age- and sex-matched to two control groups: RU controls (recreational users without vomiting), and ED controls (patients in the emergency department for an unrelated condition). Δ9-Tetrahydrocannabinol (THC), cannabidiol (CBD), cannabidiol, and 11-nor-9-carboxy-THC concentrations in scalp hair were compared for subjects with positive urine THC.

**Results:** We obtained satisfactory hair samples from 46 subjects with positive urine THC: 16 cases (age 26.8 ± 9.2 years; 69%

male), 16 RU controls and 14 ED controls. Hair cannabinoid concentrations were similar between all three groups (e.g. cases THC 220 [median; IQR 100,730] pg/mg hair, RU controls 150 [71,320] and ED controls 270 [120,560]). Only the THC:CBD ratio was different between groups, with a 2.6-fold (95%CI 1.3,5.7) lower age- and sex-adjusted ratio in cases than RU controls. Hair cannabidiol concentrations were often unquantifiably low in all subjects.

**Conclusions:** Similar hair cannabinoid concentrations in recreational users with and without hyperemesis suggest that heavy use is necessary but not sufficient for hyperemesis cannabis. Our results underline the high prevalence of chronic heavy cannabis use in emergency department patients and our limited understanding of this plant’s adverse effects.

Reproduced with permission.



Emergencias

emergencias.portalsemes.org/english

Official Journal of the Spanish Society of Emergency Medicine

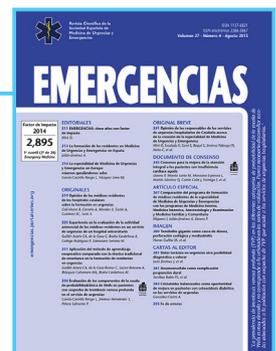
Criteria for admitting elderly patients with acute coronary syndrome to critical care units from Spanish hospital emergency departments: a LONGEVO-SCA cohort study

Lorente V, Ariza-Solé A, Jacob J, Formiga F, Marín F, Martínez-Sellés M, et al. Criteria for admitting elderly patients with acute coronary syndrome to critical care units from Spanish hospital emergency departments: a LONGEVO-SCA cohort study. *Emergencias*. 2019;31:154-160.

**Background and objective:** Information on criteria for admitting elderly patients with acute coronary syndrome (ACS) to intensive care units (ICUs) is scarce. We aimed to describe factors associated with ICU admission in unselected older patients with ACS in Spain.

**Methods:** The prospective LONGEVO-SCA registry (Impact of Frailty and Other Geriatric Syndromes on the Management of and Mortality in Elderly Patients With Non-ST-segment Elevation Acute Coronary Syndrome) included unselected patients over the age of 80 years with non-ST-segment elevation SCA. A geriatric assessment of each patient was done in the hospital. Clinical outcomes at 6 months were analyzed. Bivariate logistic regression analysis was applied to identify ICU admission criteria.

**Results:** Of 508 patients with a mean age of 84.3 years, 150 (29.5%) were admitted to the ICU. The admitted patients were younger and more often had acute heart failure, elevated troponin levels, and poor left ventricular function. They also scored higher on the Acute Coronary Treatment and Intervention Outcomes Network-ICU (ACTION-ICU) and Global Registry of Acute Coronary Events (GRACE) risk scales. These patients had higher functional status scores and a lower prevalence of frailty and had more often undergone coronary angiography (P < .001). No differences in hospital mortality or outcomes at 6 months were detected between patients admitted or not admitted to ICUs. The following variables were independent predictors of ICU admission: no history of a previous episode of heart failure, an elevated troponin level on arrival,



left ventricular dysfunction, high GRACE score and high Charlson Comorbidity Index, and absence of frailty.

**Conclusions:** Around a third of elderly patients with non-ST-segment elevation ACS are admitted to an ICU. Admitted patients have a higher risk profile on arrival and a lower prevalence of geriatric syndromes.

Reproduced with permission.

*Emergencias* publishes its articles in Spanish. Their abstracts reproduced in *Annals* have been translated into English by *Emergencias* editors, and are reproduced as received, without editing or review.

## Hong Kong Journal of Emergency Medicine

[hkjem.com](http://hkjem.com)

*Official Journal of the Hong Kong College of Emergency Medicine*

### Readiness of Hong Kong secondary school teachers for teaching cardiopulmonary resuscitation in schools: A questionnaire survey

Fan M, Leung L-P, Leung R, Hon S, Fan KL. Readiness of Hong Kong secondary school teachers for teaching cardiopulmonary resuscitation in schools: A questionnaire survey *HKJEM*. 2019;26:174-178.

**Background:** Bystander cardiopulmonary resuscitation can improve the survival rate of patients with out-of-hospital cardiac arrest. Teaching cardiopulmonary resuscitation in schools by teachers is one of the ways to increase the number of bystanders who can perform cardiopulmonary resuscitation. Nevertheless, there have been no studies on the readiness of teachers in Hong Kong to teach cardiopulmonary resuscitation in their schools.

**Objectives:** To assess whether secondary school teachers are prepared to teach their students cardiopulmonary resuscitation.

**Methods:** This was a questionnaire survey. Teachers from 22 local secondary schools were recruited. The questionnaires were designed with questions covering their knowledge about cardiopulmonary resuscitation and attitudes towards teaching their students cardiopulmonary resuscitation. A knowledge score and attitude score were calculated.

**Results:** 557 teachers completed the questionnaires. Most had never witnessed a cardiac arrest and over half of them had never been trained cardiopulmonary resuscitation or use of an automated defibrillator. About 25% of them answered all questions on knowledge wrong. Only 25% supported teaching cardiopulmonary resuscitation in schools and 32% were willing to teach it. Legal liability was a major concern.

**Conclusion:** Local teachers' readiness for teaching students cardiopulmonary resuscitation in secondary schools is likely poor. More efforts are required to raise their knowledge level on cardiopulmonary resuscitation and instill a positive attitude towards cardiopulmonary resuscitation education in schools.

Reproduced with permission.

