Cardiopulmonary Resuscitation Prescription Program: A Prospective Randomized Pilot Study

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The American Heart Association wants to increase the number of citizens who know how to perform Cardiopulmonary Resuscitation (CPR). It is unknown whether prescribed advice to patients to learn CPR is effective. We sought to determine if patients with, or at risk for, heart disease and their families were more likely to follow prescriptive advice to buy a CPR Anytime™ kit than take a CPR class.

**Objective:**

The American Heart Association wants to increase the number of citizens who know how to perform Cardiopulmonary Resuscitation (CPR). It is unknown whether prescribed advice to patients to learn CPR is effective. We sought to determine if patients with, or at risk for, heart disease and their families were more likely to follow prescriptive advice to buy a CPR Anytime™ kit than take a CPR class.

**Methods:**

This was a prospective randomized pilot study of a convenience sample of 162 patients who presented to one of three recruiting sites: a suburban community emergency department, an office based primary care or cardiology setting. After consent, CPR naïve participants aged > 44 years old were randomized. One group received a prescription for a CPR Anytime™ self-learning kit which consists of a portable CPR mannequin, and a 22 minute training DVD. The comparator group was prescribed a traditional CPR class. One-way (ANOVA) was used to compare the three groups for continuous data and Pearson’s chi-square for categorical data.

**Results:**

At the primary care office, 7/29 (24%), at the cardiology office 3/25 (12%), and at the Emergency Department 2/23 (9%), purchased the CPR kit. Across all investigational arm participants, 15% (12/81) were motivated to follow prescriptive advice to purchase the CPR kit. No subjects (0/79) took a CPR class. Cumulatively a participant was significantly more likely to purchase a kit than take a class (p=.0004). The participation refusal rates were 19% (Cardiology), 52% (Primary Care) and 51% (Emergency Department). Cardiology was statistically different from primary care and Emergency Department (both comparisons p=0.0001) but Primary Care and Emergency Department refusal rates were not statistically different (p=.895). Two subjects were excluded from analysis and 5 were lost to follow up (2 kit, 1 class at Emergency Department and 2 kit at Primary care site). Only 10% of the Emergency Department patients reported having a primary care physician or a cardiologist.

**Conclusions:**

There is some evidence that motivation of patients to purchase CPR Anytime™ kits can occur from prescribed advice in the outpatient setting. Prescribed advice to take a CPR class does not appear to be effective at motivating patients to learn CPR.