



# Major Disparities in Public Access Defibrillation Programs Implementation: a French Nationwide Study

N. Karam, W. Bougouin, MC. Perier, L. Lamhaut, F. Dumas, N. Benameur, D. Celermajer, E. Marijon, X. Jouven



# Declaration of Interest

- I have nothing to declare



## Background

---

Out-of-Hospital Cardiac Arrest (**OHCA**) **survival** rate is still low

**Importance of initial OHCA management => Public Access Defibrillation (PAD) programs**

Two aims:

Increasing Automated External Defibrillator (**AED**) **availability**

Increasing public Basic Life Support (**BLS**) **education**.

Their **implementation** and **impact** have not been simultaneously evaluated in real life.

## Purpose and key points about methods

**Purpose:** To assess PAD implementation in real life, and the potential process behind their success.

5-year prospective study in **51 French districts** (29.3 million inhabitants)

Assessment of the two arms of PAD programs:

**Density of AEDs** per 100,000 inhabitants per 1,000 km<sup>2</sup>

Number, per 100,000 inhabitants, of **persons educated in BLS**.

Per-district **OHCA survival rates** during the study period obtained from the French national registry on sports-related OHCA.

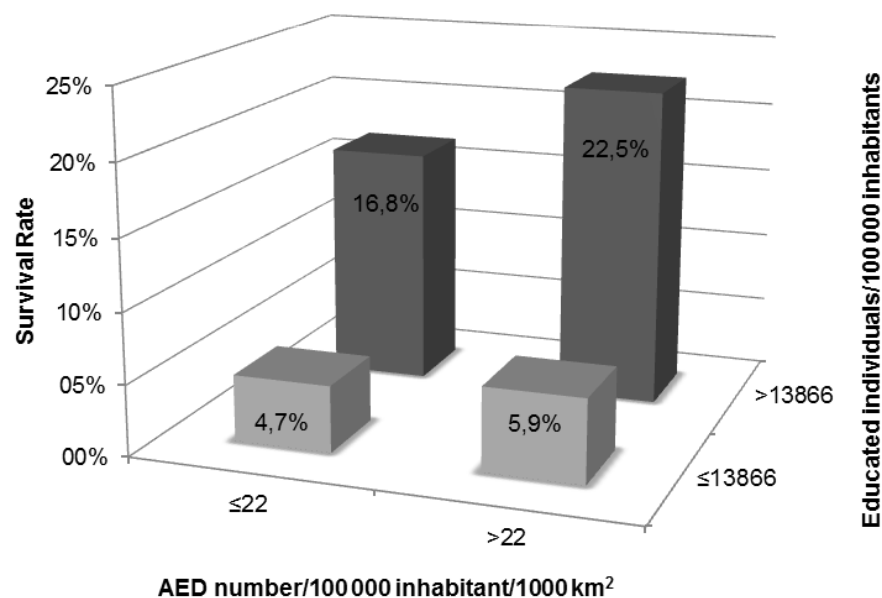
# Results

**Huge discrepancies (>100-fold) in PAD across districts**

Proportion of educated persons between 6,955 and 36,636/100,000 inhabitants

Density of AEDs between 5 and 3,399/100,000 inhabitants X 1,000 km<sup>2</sup>

**Significant and balanced programs in only a third of districts .**



## Conclusions

---

**Major heterogeneities** in PAD programs implementation

Significant **room for better coordination** in implementing their two arms

Deploying **AEDs = incomplete benefit if not combined with BLS education**

Interest for **planning public health policies** for improving OHCA survival.