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Letter to the Editor

Defibrillator deployment in France: time to put an end to the current anarchy. The ANAR-AED study



Dear Sir,

Approximately 500,000 public-access defibrillators (AEDs) have been deployed in France over the recent decades. Nevertheless, the mortality associated with out-of-hospital cardiac arrest has not decreased to the extent expected. Several explanations may account for this finding. The most important are probably the limited 24/7 accessibility of AEDs and, above all, the fact that many of them are neither registered nor geolocated.^{1,2} In addition, their geographical distribution appears to be poorly aligned with actual needs, meaning that AEDs are often not located in areas where cardiac arrests are most likely to occur.³ In simple terms, their distribution does not appear to correlate with population density. Such a situation would only be acceptable if it could be adequately explained. Consequently, we sought to identify which criteria might currently govern the deployment of AEDs across French territory. To this end, we analyzed data from the national AED registry (Géo'DAE) in an ecological, department-level study. Registration of AEDs has been mandatory since 2018 and effectively implemented since 2020. We collected data on the number of registered AEDs in each of the 95 administrative departments of metropolitan France as of November 1st, 2025. We investigated correlations between the number of reg-

istered AEDs per department and 21 health, economic, and social indicators, including: population density; number of inhabitants; physicians; dentists, pharmacies; and allied health professionals; number of private and public swimming pools; unemployed individuals; sports facilities; public-access buildings; private vehicles; McDonald's restaurants; festivals; prevalence of heart failure; proportion of inhabitants aged >60 and >75 years; poverty rate; unemployment rate; median income; and gross domestic product (GDP) per capita.

A total of 160,029 AEDs were registered in the national database, representing approximately 32% of all AEDs deployed in France. The number of AEDs per department was not correlated with population size ($r=0.04$) (Fig. A1, Appendix). The median number of AEDs was 167 (IQR 39–283) per 100,000 inhabitants, with values ranging from 2 to 3137 per 100,000 inhabitants (Fig. A2, Appendix). None of the 21 indicators studied showed a significant correlation with the departmental number of AEDs. Correlation coefficients ranged from -0.04 to $+0.27$ (the latter for the number of festivals) (Fig. 1).

The deployment of AEDs in France therefore appears to follow no rational or evidence-based criterion. The fact that two thirds of AEDs

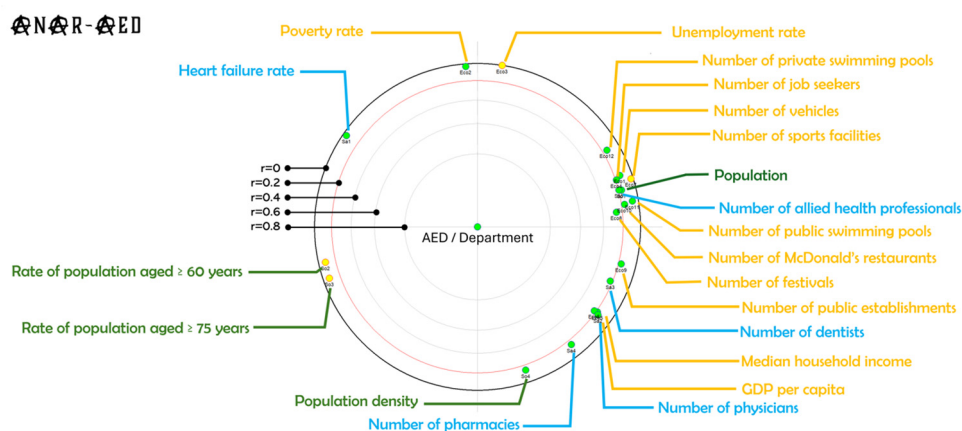


Fig. 1 – Level of correlation between the departmental number of AED and 21 indicators health, economic et social.

Green points indicate a positive correlation, yellow points a negative correlation. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

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Bruno Thomas-Lamotte^a
Maël Blandin^c
Alexis Marouk^c
Nordine Benameur^{a,b}
Frédéric Lapostolle^{c,*}

^a ARLoD, 75 rue St Charles, 75015 Paris, France

^b Centre d'Expertise Mort Subite, CHU Lille, 5 avenue Oscar LAMBRET, 59037 Lille Cedex, France

^c SAMU 93 – UF Recherche-Enseignement-Qualité, Université Paris 13, Sorbonne Paris Cité, Inserm U942, Hôpital Avicenne, 125, rue de Stalingrad, 93009 Bobigny, France

* Corresponding author.

E-mail addresses: brunothomaslamotte@gmail.com (B. Thomas-Lamotte), nordinebenameur1@gmail.com (N. Benameur), frederic.lapostolle@aphp.fr (F. Lapostolle).

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