

# Public interest in cardiac arrest after Christian Eriksen's mid-football-game event was acute rather than chronic: The analysis of Google search trends

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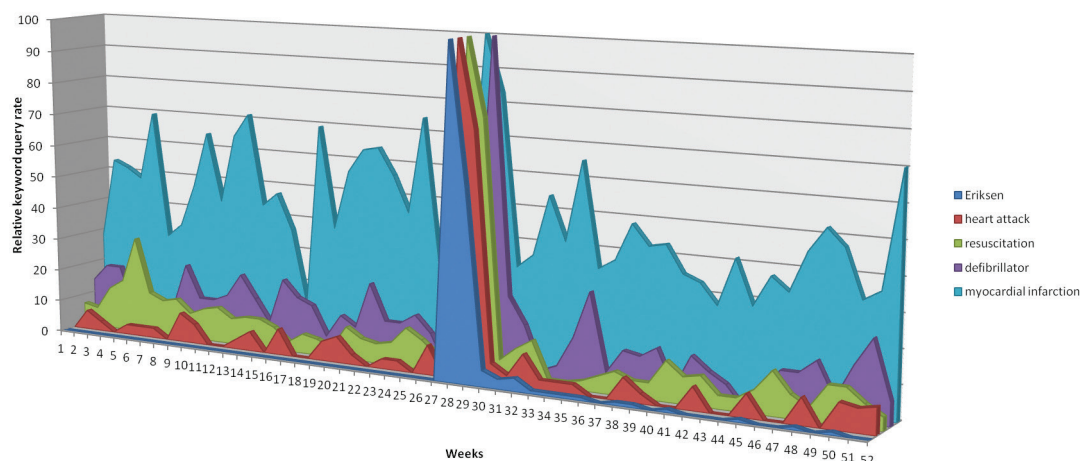
Publicly witnessed cardiac arrest raises concern among its spectators, especially when it affects young and healthy individuals, such as professional sportsmen. They are typically subject to regular medical health checks, yet it does not protect them from sudden events of potentially fatal nature [1, 2]. Such an event happened during the European Football Championship EURO 2020 and was transmitted and watched worldwide. On June 12, 2021, during a match between Denmark and Finland, a Danish player Christian Eriksen had a cardiac arrest, with immediate life support from the medical services on-site. He was then transferred to a local department of cardiology, where he received the full treatment including an implantable cardioverter-defibrillator (ICD).

One of the possible measures of the increased public interest in any topic may be the increase of queries for specific keywords in web search engines. That phenomenon may be used to identify demand for knowledge and to use to educate the public. Our study aimed to analyze the temporal pattern of interest in cardiac arrest raised by the above-mentioned event in the Polish population to determine the time frame for an educational intervention. We used analytic tools provided by Google Trends to analyze searches performed in Poland during 12 months preceding the date of our data access (November 25, 2021). Keywords that were investigated are listed in the Supplementary material, *Table S1*. Trends of queries for all the keywords were reported as relative weekly rates for each of the 52 weeks. The value

100 corresponded to the maximum interest, while 0 corresponded to no interest.

We analyzed the correlations of temporal trends of searches for specific keywords. Detailed values for all correlations are presented in the Supplementary material, *Figure S1*. Our interest focused on the keywords with the highest correlation with the query "Eriksen," as we believed that it was the unfortunate event linked to that player that prompted people to search information about the player, the event itself, and all the health-related issues. We selected four keywords with statistically significant correlation ( $P < 0.05$ , correlation coefficient above 0.5, see Supplementary material, *Table S1*) and plotted them on the timeline along the search trend for the player's name to investigate the time relationships of the trends. That comparison is presented in *Figure 1*. Those four keywords in order of highest correlation were "heart attack," "resuscitation," "defibrillator," and "myocardial infarction". Based on the temporal relations, we consider that the spike in the relative search rate for those four keywords was related to the event described above. Noticeably, that interest was relatively short-lived and returned to the baseline during the third consecutive week.

As the immediate reaction of witnesses may improve prognosis [2, 3], it is crucial to use every opportunity for public education regarding cardiac arrest and resuscitation. According to our analysis, tragic news regarding sudden cardiac arrest during mass events may ignite interest in the general population and increase the demand for educational content.



**Figure 1.** Temporal relations of the relative search rate for the four cardiovascular disease-related key words (“heart attack”, “resuscitation”, “defibrillator” and “myocardial infarction”) most correlated with the search for “Eriksen” in the analyzed time frame (52 consecutive weeks, from November 25, 2020 to November 25, 2021)

However, meeting that demand with expert knowledge has to be prompt as the interest may peter out as soon as after several weeks.

### Supplementary material

Supplementary material is available at [https://journals.viamedica.pl/kardiologia\\_polska](https://journals.viamedica.pl/kardiologia_polska).

### Article information

**Conflict of interest:** None declared.

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