

Prehospital Physician Presence During Paediatric OHCA



A study was conducted to investigate whether the presence of prehospital physicians affected the neurological outcomes of paediatric patients who experienced an out-of-hospital cardiac arrest (OHCA). The study included paediatric patients who were 17 years old or younger and were registered in a database between June 2014 and December 2019.

The researchers used logistic regression models and stabilised inverse probability of treatment weighting (IPTW) to analyse the effect of prehospital physician presence on neurological outcomes, in-hospital return of spontaneous circulation (ROSC), and 1-month survival for paediatric patients after OHCA. The study included 1,187 patients. Two hundred seventy-six of these patients were treated by prehospital physicians, while 911 patients were not. The results showed that patients in the physician presence group had higher rates of favourable neurological outcomes (8.3% vs 3.6%) and in-hospital ROSC than patients in the physician absence group. After adjusting for stabilised IPTW, the study found that prehospital physician presence was associated with a higher chance of 1-month neurologically intact survival. However, the researchers failed to identify an association with 1-month survival. The adjusted odds ratios were 1.98 for 1-month neurologically intact survival (95% CI 1.08–3.66) and 1.48 for in-hospital ROSC (95% CI 1.08–2.04).

The researchers found that the presence of prehospital physicians was associated with better neurological outcomes for paediatric patients. Specifically, patients who received care from prehospital physicians had a higher chance of surviving with good neurological function compared to those who did not receive care from prehospital physicians.

Overall, as per the findings of this study, in paediatric patients who experienced out-of-hospital cardiac arrest, the presence of a prehospital physician was associated with almost a two-fold greater chance of 1-month favourable neurological outcomes when compared to the absence of a prehospital physician. These results suggest that having a prehospital physician present during treatment may be beneficial in improving neurological outcomes for paediatric patients who experience an out-of-hospital cardiac arrest.

Source: [Paediatric Critical Care Medicine](#)

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