pressure,and post-event emotional recovery,signaling a strong interest in a more human-centered training experience.

Conclusions

While the current BLSD methodology effectively fosters emotional confidence through its pedagogical and experiential strengths, the demand for deeper psychological preparation suggests potential for growth. The addition of a structured training focused on cognitive load, acute stress, and emotional reactions may represent a significant enhancement.Such a module could further strengthen the course by helping trainees build a resilient mindset, ultimately improving intervention outcomes in high-pressure situations.

A19

To CPR or not to CPR? That is the bystander's question

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Background

Cardiac arrest is a major clinical emergency that, unless immediate cardiopulmonary resuscitation or defibrillation is started, can rapidly results in death. Nonetheless, in about half of cases witnessed, no resuscitation is initiated by laypersons. Multiple reasons are beyond this resistance, which are not yet fully understood.

Objective

To identify predictors for lower likelihood of bystanders attempting resuscitation.

Methods

Out-of-hospital cardiac arrests occurring in Lombardy region between July 1, 2024, and May 30, 2025, treated only by laypersons were included in this study.

Results

Among 11.945 registered cardiac arrests, 4.132 were assisted by laypeople. Logistic regression showed a lower likelihood of CPR in urban areas (OR 0.89; 95% CI: 0.86–0.93), in non-medical events (OR 0.85; 95% CI: 0.81–0.87), among female patients (OR 0.95; 95% CI: 0.92–0.98), in patients aged >80 years (OR 0.81; 95% CI: 0.79–0.84), and in cardiac arrests at home (OR 0.79; 95% CI: 0.76–0.82). Conversely, an EMS response time below 15 minutes was associated with a higher likelihood of resuscitation attempts (OR 1.05; 95% CI: 1.03–1.09).

Conclusions

Both sex- and age-related differences call for enhanced educational materials within BLSD courses, as well as inclusion of such variables by dispatch centers. Development of specific communication strategies and establishment of further research on such processes are essential in raising bystander resuscitation rates.

A20

Pre-Arrival Instructions and Outcomes in Out-of-Hospital Cardiac Arrest: A Six-Month Observational Study in Southern Italy

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Background

Out-of-hospital cardiac arrest (OHCA) is associated with very high mortality despite advances in emergency care. Early bystander cardiopulmonary resuscitation (CPR) guided by emergency dispatchers through pre-arrival instructions (PAI) has been proposed as a strategy to improve survival.

Objective

To describe the demographic and clinical characteristics, initial rhythms, response times, therapeutic interventions, and outcomes of OHCA cases managed after the systematic introduction of PAI in our local emergency medical system.

Methods

This retrospective observational study included all OHCA cases attended by the 118, ASL Lecce (Italy) between January and June 2025. Data were collected prospectively from the EMS registry. Variables analyzed included patient demographics, arrest location, witness type, PAI performance, response intervals, initial cardiac rhythm, therapeutic measures, and outcomes. Descriptive statistics were applied, with results reported as means ± standard deviations, medians, and proportions.

Results

36 OHCA cases were recorded. Patients were predominantly male (69.4%) with a mean age of 71.9 ± 13.4 years. Most events occurred at home (91.7%) and were witnessed by family members (91.7%). CPR instructions were delivered in 88.9% of calls. The mean interval between the call and arrival of the first rescue team was 13.6 ± 6.2 minutes. CPR was initiated in 75.0% of patients, defibrillation in 11.1% (average 3.5 shocks per patient), and drugs were administered in 63.9%. ROSC occurred in 8.3% of cases, while 91.7% were declared deceased on scene.

Conclusions

Systematic dispatcher-led PAI was associated with high rates of bystander CPR and a measurable rate of ROSC in OHCA cases. These findings support the integration of PAI as a standard component of emergency medical dispatch and warrant further evaluation in larger cohorts with long-term outcome data.

A21

From decline to recovery: the lasting impact of COVID-19 on Out-of-Hospital Cardiac Arrest

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Background

The COVID-19 pandemic caused a significant strain on emergency medical systems, affecting outcomes of time-dependent diseases like Out of Hospital Cardiac Arrest (OHCA). Studies have shown an increase in the incidence of OHCA during the pandemic, but there is limited evidence on how survival rates and rescue efforts have been affected in the post-pandemic period.

Objective

This study analyzes OHCA during the pre-pandemic, pandemic and post-pandemic period, with a focus on outcomes and rescue maneuvers.

Methods

This is a retrospective observational cohort study considering all OHCA managed by AREU (Agenzia Regionale Emergenza Urgenza),

in the italian Lombardy region in March of three different years (2019, 2020 and 2022). Data was collected from AREU's database, where information of patient rescue missions managed by the Lombardy Region's emergency medical system is recorded.

Results

The registered OHCA cases were 1097 in 2019, 1767 in 2020 and 934 in 2024. The results showed that during the pandemic period the probability of receiving bystander CPR (22.5% vs 17.4%, p value<0.001), PAD care (3.6% vs 1.6%, p value<0.001) or achieving ROSC (11.5% vs 2.3%, p value<0.0001) was significantly lower than in the pre-pandemic period. Conversely, data from 2024 shows a significant increase in the probability of receiving bystander cardiopulmonary resuscitation compared to 2019 (28% vs 22.5%; p=0.003), while probability to receive PAD care has returned similar to the pre-pandemic period (4.3 vs 3.6; p=0.39). However, there is a persistent decrease in ROSC rates (8.7% vs 11.5%; p=0.04).

Conclusions

Bystander resuscitation has improved in the post-pandemic period, possibly due to an increased public attention following the pandemic. Conversely, PAD use has returned to pre-pandemic levels. However, ROSC rates remain lower than before COVID-19, suggesting a lasting impact on outcomes and the need for targeted interventions to restore the chain of survival.

A22

Advanced Nursing Competencies in Prehospital Emergency Care: A Professionalizing Experience for Critical Care Master's Students at the Modena 118 Emergency Medical Service

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Background

In postgraduate healthcare education, internships play a strategic role in bridging academic learning with the practical demands of organizational and clinical contexts, ensuring coherence between expected competencies and clical practice.

Objective

To standardize and enhance the internship pathway by developing and assessing competencies according to the Dublin Descriptors.

Methods

The project involved a shared definition of expected competencies, the design of standardized assessment tools (checklists and questionnaires), and alignment of training with scientific evidence, while also integrating relational and ethical dimensions of professional practice. A 150-hour internship was conducted within the Territorial Emergency Medical Service (EMS 118) of Modena, in nurse – led and physician – led units, under the supervision of experienced clinical tutors. Training activities included active observation, operational shadowing, and progressive autonomy, supported by structured debriefings and theoretical sessions.

Results

Preliminary data indicate improved methodological consistency and strengthening of students' specialized competencies.

Conclusions

An internship model grounded in active learning methodologies and standardized assessment tools may represent a replicable approach for critical care education. Its key strengths lie in the centrality of situated and reflective learning, the use of shared evaluation instruments, and the enhanced role of the tutor as facilitator. Future developments should focus on extending this model to foster communities of practice and to promote deeper integration between academic education and clinical practice.

A23

The dark side of public access defibrillation: Ten years of AED thefts and malfunctions reported by Italian online newspapers

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Background

Automated external defibrillators (AEDs) are essential tools for survival in out-of-hospital cardiac arrest. Their availability is a cornerstone of emergency preparedness, as it integrates the community into emergency medical response. However, AEDs installed in public spaces are occasionally subject to theft, vandalism, or malfunction, which compromises their life-saving potential.

Objective

To analyze the frequency and geographical distribution of AED-related problems in Italy -specifically thefts and cases of malfunction or inaccessibility- reported by online newspapers over the past decade (2015-2025).

Methods

A retrospective search (January 2015– June 2025) was conducted in Google News. Two researchers independently screened results. Data included date, region, city, context, type of issue, and source.

Results

142 AED-related events were identified: 108 thefts and 34 cases related to malfunction or unavailability (locked facilities, battery failure, missing electrodes). The most affected regions were Lombardy, Sicily, and Campania. Media coverage often reflected strong community concern and social condemnation. These results, based exclusively on news media reports, may underrepresent the actual frequency of AED-related problems.

Conclusions

In Italy, AED thefts appear more frequent than international reports, which estimate <2% of public devices are affected. However, the true incidence remains unknown, as AEDs are not consistently included in registries or geolocated maps. In addition to theft or damage, many devices installed through donations or public funding are later neglected, with no routine maintenance or oversight. This silent failure represents a critical gap that undermines emergency response. These findings call for preventive measures, such as systematic monitoring, maintenance programs, geolocation, and alert systems, supported by public awareness campaigns to protect this vital health resource.

A24

Red code, pain ignored: rethinking analgesia in emergency care

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Background

The clinical context of emergency and urgent care is characterized by the phenomenon of oligoanalgesia, defined as inadequate pain management. Oligoanalgesia is a significant issue in Italy. Currently, there is no single standard for pain treatment in emergency settings, and practices vary based on local protocols.

Objective

This study aims to examine the current state of practice within our working context, with the objective of proposing solutions and innovations to enhance pain assessment.