The Role of Do Not Attempt Resuscitation Directives in Treatment of Patients with Out-of-Hospital Cardiac Arrest

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BACKGROUND

A Do Not Attempt Resuscitation (DNAR) directive is a physician order that conveys the desires of a patient to not be resuscitated from a cardiac arrest (Figure 1).

PURPOSE

• Characterize the frequency of DNAR encounters and the treatments received by those patients.
• Describe the differences in scale of care received by patients that have DNAR orders.

METHODS

We retrospectively analyzed all treated adult OHCA patients in 2018 that had DNAR orders documented by EMS in a large urban/suburban community. Data were abstracted from EMS patient care reports, 911 dispatch audio recordings, and defibrillator electrocardiogram and audio recordings. We compared patients who received full resuscitative efforts to those with some limitation of their resuscitation (Table 1).

RESULTS

• 98 included patients, average age was 80 years (SD ±10.6), 54 (55%) were male.
• 54 (55%) had their OHCA at home, and 53 (54%) received bystander cardiopulmonary resuscitation.
• Copies of DNAR orders were onsite in 78% of cases and obtained by providers on average 6.5 minutes (SD ±4.6) and 7.1 minutes (SD ±6.1) after their on-scene arrival in the full efforts and limited efforts groups, respectively.
• Nineteen patients (83%) receiving full efforts and six patients (8%) in the limited efforts group achieved a perfusing rhythm (Figure 2).

LIMITATIONS

This study is limited by the exclusion of patients with valid DNAR orders that never receive resuscitative efforts by EMS, and a small sample size.

CONCLUSIONS

Delays in the presentation of DNAR orders during OHCA are common. This delay combined with family member confusion or contradiction of the DNAR orders frequently results in undesired resuscitative efforts. How DNAR directives are best operationalized and implemented requires further evaluation.

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Figure 1: DNAR Flowchart

Figure 2: Cardiac Arrest Care Level (OHCA Care Level)

Table 1: DNAR details

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Complete Resuscitation</th>
<th>Truncated Resuscitation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Patients</td>
<td>23</td>
<td>75</td>
</tr>
<tr>
<td>No Code per DNAR</td>
<td>17 (74%)</td>
<td>71 (95%)</td>
</tr>
<tr>
<td>Witnessed</td>
<td>16 (70%)</td>
<td>25 (33%)</td>
</tr>
<tr>
<td>Preventing in Shockable Rhythm</td>
<td>4 (17%)</td>
<td>5 (7%)</td>
</tr>
<tr>
<td>Family Fully Abiding By DNAR</td>
<td>8 (35%)</td>
<td>35 (47%)</td>
</tr>
<tr>
<td>Family Fully Disregarding DNAR</td>
<td>6 (26%)</td>
<td>8 (11%)</td>
</tr>
<tr>
<td>Family Requesting No Resuscitation With No DNAR Found/Available</td>
<td>3 (4%)</td>
<td>6 (8%)</td>
</tr>
<tr>
<td>Family Initially Disregarding DNAR, But Later Changing Mind</td>
<td>2 (9%)</td>
<td>3 (4%)</td>
</tr>
</tbody>
</table>

Figure 3: Completed Resuscitation vs. Truncated Resuscitation

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