Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Letter to the Editor

Ethical considerations during critical care from an age-specific perspective

To the Editor,

In the recently published manuscript of Sutton and co-workers the authors raised awareness about the need to consider do not attempt cardiopulmonary resuscitation (DNACPR) decisions during the present SARS-CoV-2 pandemic.[1] They mentioned that an appropriately implemented DNACPR decision can preserve the patient's wishes and best interests – however, the authors highlighted that many individuals with an early DNACPR decision (median age: 81 years (IQR: 73–87) received life-saving interventions.

In this regard, the ethical perspective of a shared decision making needs to ground on profound knowledge among patients in terms of extent and consequences of the respective disease, including the individual prognosis and the potential loss of autonomy during intensive care measures and advanced life support.

Physicians and healthcare providers are often faced with an ethical dilemma in deciding for or against the initiation and continuation of critical care attempts and resuscitation efforts especially in older individuals. Notably, the current guidelines of the ERC extensively discussed the issue of ethics in resuscitation and end of life prognostication, putting a major focus on the patients' autonomy as well the principle of beneficence.[2] In this regard beneficence refers to assessing the patients' relevant risk and benefit of a medical intervention. Additionally, the afore mentioned guidelines say that resuscitative attempts, as a medical intervention with low likelihood of success, should not be performed in futile cases – but assessing futility in a precise, prospective and applicable way remains difficult during cardiac arrest.

Futile resuscitation warrants further discussion. The term "medical futility" mirrors an approach regarding a specific intervention as "futile" if it has been unsuccessful within the past 100 cases or a treatment merely preserves permanent unconsciousness or cannot end dependence on intensive medical care.[3] Therefore, a chance of less than 1% of success of medical therapy or intervention should be assumed as "medically futile". Recent data indicated that patients older than 85 years experiencing cardiac arrest had a poor 30-day survival rate of approximately 5% reaching favorable neurological outcome in less than 1% of all cases. Considering the results of recent analysis, this threshold of $\geq$1% was not reached for favorable neurological outcome in old and frail individuals within recent reports.[4]

A large number of well powered reports highlighted that especially older individuals are less afraid of death itself but fear the loss of their physical and mental autonomy including living in a vegetative neurological state.[5,6] Taking this data into account, it is essential not to focus solely on survival but also on measures for a favorable neurological outcome after cardiac arrest, which proved to be of utmost importance in older individuals.

In this regard the patients' autonomy as well the principle of beneficence needs to be taken into account. While withholding life-supporting therapies in individuals with futile prognosis is indisputable, healthcare providers need to consider the patients' wish for the capability of physical and mental autonomy after survival of cardiac arrest when facing this ethical dilemma in deciding whether for or against the initiation of resuscitative efforts in older individuals during but also after COVID-19.

Ethical approval and consent to participate

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Consent for publication

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Availability of supporting data

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Declaration of Competing Interest

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