

Epidemiology of Near-death experiences (L1711)

Near-death experiences are difficult to study because they are not unique to a single cause of death. Thus, establishing an incidence is difficult due to the inability to assess near death experiences systematically in such a wide array of situations (e.g., drowning, trauma) and furthermore because they can sometimes occur during crises that are unrelated to the actual process of dying (e.g., a near-miss motor vehicle accident).²⁶ Thus, the epidemiology of near-death experiences has focused largely on in-hospital cardiac arrests. The seminal study of near-death experience incidence in survivors of cardiac arrest was conducted in the Netherlands and published in 2001.¹ This prospective investigation included 344 patients who underwent 509 successful resuscitations. Using what is considered a more liberal scale for near-death experience, 18% of cardiac arrest survivors reported near-death experiences, with no obvious difference in pharmacologic interventions between those who had them and those who did not. Notably, 2-yr outcomes for cardiac arrest survivors with and without near death experiences demonstrated a transformative effect that affected social attitude, religious attitude, attitude toward death, and an interest in the meaning of life and appreciation of ordinary things. In the same year, Parnia et al.²⁷ published a smaller study of 63 patients (number of successful resuscitations unknown) using a more conservative near-death experience scale and found that 6.3% reported them. Again, there was no obvious difference in the pharmacology of resuscitation efforts. More recently, Parnia et al.^{28,29} conducted the AWAreness during REsuscitation (AWARE) studies (AWARE I in 2014 and AWARE II in 2023). AWARE I was a prospective, multicenter observational investigation of cardiac arrest survivors, with 140 patients studied for a stage 1 interview and 101 of those patients who completed stage 2 interviews.²⁸ Near-death experiences were reported by 9%, with 2% reporting actual awareness of resuscitation events; a much broader group (46%) reported recollection of some experience (e.g., *déjà vu*, bright lights). AWARE II was a 25-site prospective study that included more objective measures such as audiovisual testing using a computer and headphones, continuous electroencephalography, and cerebral oximetry.²⁹ There were 567 in-hospital cardiac arrests, of which 53 survived, of which 28 were available for interviews. Of those available for interviews, 21.4% had what was categorized as a transcendent recalled experience of death (a term proposed to replace near-death experience). In summary, near-death experiences and other experiences are common around the time of cardiac arrest and pose a challenge in reconciling apparent behavioral quiescence and a dysfunctional brain with what can be vivid and transformative phenomenology.

瀕死體驗的流行病學

瀕死體驗很難研究，因為它們並非單一的死亡原因所獨有。因此，由於無法在如此廣泛的情況（例如，溺水、創傷）中系統地評估瀕死體驗，而且因為它們有時可能發生在與實際死亡過程無關的危機期間（例如，險些未遂的機動車事故），因此很難確定發生率。²⁶因此，瀕死體驗的流行病學主要集中在院内心臟驟停上。

這項關於心臟驟停倖存者瀕死體驗發生率的開創性研究在荷蘭進行，並於 2001 年發表。¹這項前瞻性調查包括 344 名患者，他們接受了 509 次成功的復甦。使用被認為更自由的瀕死體驗量表，18% 的心臟驟停倖存者報告了瀕死體驗，有這些經歷的人和沒有經歷的人在藥物干預方面沒有明顯差異。值得注意的是，有和沒有瀕死經歷的心臟驟停倖存者的 2 年結果表明，影響社會態度、宗教態度、對死亡的態度以及對生命意義的興趣和對普通事物的欣賞的變革性影響。

同年，Parnia 等人。²⁷發表了一項對 63 名患者（成功復甦次數未知）使用更保守的瀕死體驗量表進行的小型研究，發現 6.3% 的患者報告了這些情況。同樣，復甦努力的藥理學沒有明顯差異。

最近，Parnia 等人^{28,29}進行了 AWAreness during REsuscitation (AWAre) 研究(2014 年的 AWAre I 和 2023 年的 AWAre II)。AWAre I 是一項針對心臟驟停倖存者的前瞻性、多中心觀察性調查，有 140 名患者接受了 1 期訪談，其中 101 名患者完成了 2 期訪談。²⁸9% 報告了瀕死體驗，其中 2% 報告對復甦事件有實際意識；更廣泛的群體 (46%) 報告了對一些經歷的回憶（例如，似曾相識、明亮的燈光）。AWAre II 是一項 25 個地點的前瞻性研究，包括更客觀的措施，例如使用計算機和耳機進行視聽測試、連續腦電圖和腦血氧測定。²⁹有 567 例住院心臟驟停，其中 53 例倖存，其中 28 例可以接受面談。在可以接受採訪的人中，21.4% 的人被歸類為超然的回憶死亡經歷（該術語被提議取代瀕死體驗）。總之，瀕死體驗和其他經歷在心臟驟停前後很常見，並且在調和明顯的行為靜止和功能失調的大腦與可能生動和變革性的現象學之間構成了挑戰。

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