

NEAR-DEATH EXPERIENCES IN NON-LIFE-THREATENING EVENTS AND COMA OF DIFFERENT ETIOLOGIES



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Objectives:

Near death experiences (NDEs) are increasingly being reported as a clearly identifiable physiological and psychological reality of clinical significance.

Empirical studies of NDEs have mostly been conducted in patients with life threatening situations such as cardiac arrest [1-5] or (albeit more rarely) in patients with severe traumatic brain injury[6].

To the best of our knowledge, no study has formally compared the influence of the cause of coma to the intensity or content of the NDE.

Using the Greyson NDE scale [7], the present retrospective study aimed at: (1) exploring the NDE intensity and content in “NDE-like” accounts following non-life-threatening events versus “real NDE” following coma; (2) comparing the “real NDE” characteristics according to the etiology of the brain damage (anoxic, traumatic or other) and; (3) comparing our retrospectively obtained data in anoxic coma to historical previously published prospectively collected post-anoxic NDEs.

Methods:

All participants filled a questionnaire including items about demographic (age at NDE, gender) and clinical data (time since NDE, presence of life threatening event, presence of acute coma (i.e., a period of unconsciousness > 1 h; [8]), etiology of coma (anoxic/traumatic/other) and a standardized characterization of the NDE using the Greyson NDE scale [7].

We also compared our retrospectively acquired data in anoxic coma with historical data from the published literature on prospective post-anoxic studies using the Greyson NDE scale.

A Pearson’s chi square test with contingency tables was performed to assess for possible discrepancies between the reported features frequencies according to the coma etiology.

Finally, our retrospective data in anoxic coma were compared with a historical dataset of prospective data taken from the published literature on NDE after anoxic coma [1-5].

Conclusion & discussion:

It appears that “real NDEs” after coma of different etiologies are similar to “NDE-like” experiences occurring after non-life threatening events and that subjects reporting NDEs retrospectively tend to have experienced a different content compared to the prospective experiencers.

In line with our findings [9], NDE research might benefit from the introduction of a new terminology to account for “NDE-like” experiences. In addition to the use of closed NDE questionnaires, which only leave restricted choices for describing the experience, future studies should employ statistical examination of freely expressed NDEs narratives using automated user-independent qualitative analyses of their content, taking into account the clinical data and study design.

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Results:

From our 190 reports who met the criteria for NDE (i.e., Greyson NDE scale total score >7/32), intensity (i.e., NDE scale total score) and content (i.e., Greyson NDE scale features) did not differ between “NDE-like” (n=50) and “real NDE” (n=140) groups, nor within the “real NDE” group depending on the cause of coma (anoxic/traumatic/other; see table below).

The most frequently reported feature was peacefulness (89-93%). Only 2 patients (1%) recounted a negative experience.

| NDE Scale features | “NDE-like” n=50 (%) | “Real NDE” n=140 (%) | p | “Real NDE” etiologies | | | p |
|--|------------------------|-------------------------|------|-----------------------|--------------------|-------------------|-------|
| | | | | Anoxia n=45 (%) | Trauma n=30 (%) | Other n=65 (%) | |
| “Did you have a feeling of peace or pleasantness?” | 45 (90) | 127 (91) | 0.88 | 40 (89) | 28 (93) | 59 (91) | 0.81 |
| “Did you feel separated from your body?” | 37 (74) | 111 (79) | 0.44 | 36 (80) | 24 (80) | 51 (79) | 0.98 |
| “Did you see, or feel surrounded by, a brilliant light?” | 42 (84) | 106 (76) | 0.23 | 32 (71) | 20 (67) | 54 (83) | 0.15 |
| “Did time seem to speed up or slow down?” | 41 (82) | 105 (75) | 0.31 | 35 (78) | 24 (80) | 46 (71) | 0.55 |
| “Did you seem to enter some other, unearthly world?” | 35 (70) | 101 (72) | 0.77 | 33 (73) | 21 (70) | 47 (72) | 0.95 |
| “Did you have a feeling of joy?” | 37 (74) | 98 (70) | 0.59 | 32 (71) | 18 (60) | 48 (74) | 0.38 |
| “Did you feel a sense of harmony or unity with the universe?” | 39 (78) | 96 (69) | 0.21 | 33 (73) | 21 (70) | 42 (65) | 0.61 |
| “Did you come to a border or point of no return?” | 31 (62) | 86 (61) | 0.94 | 22 (49) | 20 (67) | 44 (68) | 0.11 |
| “Were your senses more vivid than usual?” | 34 (68) | 84 (60) | 0.32 | 25 (56) | 16 (53) | 43 (66) | 0.38 |
| “Did you suddenly seem to understand everything?” | 25 (50) | 76 (54) | 0.60 | 26 (58) | 20 (67) | 30 (46) | 0.15 |
| “Did you seem to encounter a mystical being or presence, or hear an unidentifiable voice?” | 29 (58) | 71 (51) | 0.38 | 20 (44) | 12 (40) | 39 (60) | 0.12 |
| “Were your thoughts speeded up?” | 20 (40) | 62 (44) | 0.60 | 23 (51) | 15 (50) | 24 (37) | 0.26 |
| “Did you see deceased or religious spirits?” | 17 (34) | 54 (39) | 0.57 | 12 (27) | 9 (30) | 33 (51) | 0.063 |
| “Did you seem to be aware of things going on elsewhere, as if by ESP?” | 14 (28) | 47 (34) | 0.50 | 10 (22) | 9 (30) | 28 (43) | 0.067 |
| “Did scenes from your past come back to you?” | 9 (18) | 37 (26) | 0.23 | 11 (24) | 11 (37) | 15 (23) | 0.35 |
| “Did scenes from the future come to you?” | 9 (18) | 26 (19) | 0.93 | 8 (18) | 5 (17) | 13 (20) | 0.92 |
| Total score (mean±SD, range) | 17 ± 7 7 - 30 | 16 ± 6 7 - 30 | 0.10 | 15 ± 6 7 - 28 | 16 ± 6 7 - 26 | 16 ± 6 7 - 30 | 0.29 |

The overall NDE core features’ frequencies were higher in our retrospective anoxic cohort when compared to historical published prospective data (see figure below).

