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According to Mays, the design of the study has significant problems. First of all, the fundamental issue is that it examines only those cases that have occurred during cardiac arrest and only in an experimental model of hidden optics, targets placed on shelves. The goal of the research is to demonstrate consciousness activity while there was no electrical activity in the brain.

The main problems of the investigation, according to the Mays are divided into three points:

- Very few cases were found for a huge investment of effort.

Of the original 2,060 CA cases reviewed, 95% were excluded before an assessment was made as to whether the case involved an NDE. The remaining 101 patients had the stage 2 interview to determine whether there was an NDE and whether there were memories of auditory/visual awareness of the physical environment. There were 9 NDE cases. Of these only two cases were suitable for the Stage 3 interview to determine the accuracy of statements and only one could complete this detailed analysis.

- Experimental vs. Phenomenological emphasis.

There is general confusion regarding the method used for experiments, that the only acceptable scientific evidence comes from experiments conducted under controlled conditions. However, there are many phenomena where controlled experiments are impossible or impractical. In these cases, scientists use phenomenological research in conjunction with theory development. With this alternative method, the researcher looks for anomalous phenomena (or anomalous aspects of a known phenomenon) and develops a theoretical model that explains the phenomenon, including the anomalous aspects. The explanation may or may not be mathematical in nature. NDEs are very amenable to phenomenological investigation, and the variant of NDEs contains many anomalous or paranormal aspects, where an anomaly may occur on a small number of occasions but is nevertheless repeated enough to warrant theoretical developments. Imposing an experimental requirement in the investigation of NDEs, as in the AWARE study, is problematic because the experimental conditions cannot be controlled.

- Reference to cardiac arrest cases as the best model.

Various studies have convincingly shown that there is no difference in intensity and content between NDEs resulting from sleep, syncope (fainting) and meditation and those resulting from coma-related events such as: drowning, cardiac arrest, severe disease. Much theoretical study and analysis has shown that NDEs occur in their "purest" and "deepest" form when the brain's electrical activity stops. Thus, any anomalous aspect that can be shown to have occurred during the electrical flatline will provide the clearest evidence that consciousness can function independently of the brain. Thus, the best model of NDEs that occur "near death," as Parnia and other NDE researchers argue, is "true death," that is, clinical death that occurs by cardiac arrest. The choice of clinical death from cardiac arrest as the "gold standard" for NDE evidence is based, according to Mays, on a faulty assumption and unfortunate previous analyzes of NDE data. Also, the requirement to prove that there was no electrical brain activity and therefore an actual "separation" of mind from body is very problematic because of the generally short interval between capture in a hospital setting and resuscitation. The cardiac arrest model is also problematic because it provokes endless debate

about exactly when NDE awareness occurred, when brain activity stopped and restarted, and whether there was residual brain activity in between.<sup>27</sup>

### Conclusions

After exploring the subject of out-of-body experiences in the context of near-death experiences, we see that any investigation of the phenomenon is difficult. In addition to the difficulty of finding subjects for a near-death and out-of-body experience statement, as we have seen, of those who survived cardiac arrest, roughly between 10% and 20% were able to report an NDE or something similar to an NDE, even fewer were able to register further statements about an out-of-body experience, and only unique cases can correspond to a positive answer to Parnia's research question, whether there really is a function of consciousness separate from the function of the brain. While the results of Parnia's researches face severe criticism, and while some points of this criticism are of great importance for future research in this field, Parnia himself is curious, although he does not overlook the purely scientific side, saying: "*Thus, while it was not possible to absolutely prove the reality or meaning of patient experiences and sensitization claims, ... It was impossible to disprove them either, and more work is needed in this area. Clearly, the recalled experience around death now deserves further genuine research without prejudice*"<sup>28</sup>. In our opinion, having also studied Parnia's research, the books of William Barrett and Raymond Moody, the various researches and articles and also the criticism of the work of Parnia, the AWARE and AWARE II studies, are of great value. While they are currently struggling to show any positive results, even the unique cases they report are worthy of attention. However, we consider that Mays's criticism is very important since it shows Parnia's weak points and thus opens up the possibility of a new approach to the subject. Of particular importance to us seemed to be the comment on the research method, which concerns the way in which the findings are examined and in which the hypotheses are built. We would venture to say that it seems to us that phenomenological research together with theoretical development could perhaps be a better avenue for further research. At least it would be possible to try a new way, since the one used by Parnia did not bring results to the satisfaction of the scientific community. The question, however, as Parnia points out, remains open.

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