Near-death experiences in medicine

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ABSTRACT

Near-death experiences (NDEs) have been a source of controversy within academia and the public. NDEs occur in 10% to 20% of patients who have come close to death and consist of vivid, subjective experiences that occur during life-threatening emergencies. Specifically, NDEs include out-of-body experiences, pleasant feelings, seeing deceased relatives, a life review, or a conscious return into the body. Although alternate psychological and physiological theories have been proposed, several methodological and neuroscientific limitations prevent their verification. Despite these limitations, counselors trained with NDE literature reduced suicidal thoughts, bereavement, and posttraumatic stress disorder among their patient populations. In addition, patients who have experienced an NDE showed significant transformation in their spiritual and emotional lives, with many stating a renewed sense of meaning, existential awareness, and mystical experiences. Family and friends of patients who have experienced an NDE also report increased comfort, hope, and inspiration. Overall, NDEs have positively impacted the medical profession and physician-patient interactions and represent a growing paradigm shift beyond the naturalistic interpretations of science and medicine.

KEYWORDS Consciousness; mind-body paradigm; near-death experiences

Near-death experiences (NDEs) have been an intense source of controversy within academia and the public since the first accounts by Albert von St. Gallen Heim in 1892.¹ NDEs occur in 10% to 20% of patients who have come close to death and consist of vivid, subjective experiences that occur during life-threatening emergencies, such as cardiac arrest or head injury.^{2,3} Specifically, NDEs include “special elements, such as an out-of-body experience, pleasant feelings, seeing a tunnel and/or light, seeing deceased relatives, a life review, or a conscious return into the body.”⁴ Although different psychological, physiological, and philosophical theories have been proposed, several methodological and neuroscientific limitations prevent their verification.⁵ Furthermore, NDEs occur when the brain is starved of oxygen, such as medical emergencies or administration of anesthetics, leading to a surge in neural activity that may correlate with NDEs.^{5,6} As Bruce Greyson explained, “NDEs ... involve vivid and complex thinking, perception, and memory formation under conditions in which current neuroscientific models of the mind deem such cognitive processes impossible, such as under general anesthesia and in cardiac arrest.”⁵

Despite these challenges, NDEs have positively impacted the medical profession and physician-patient interactions.⁵ Counselors trained with NDE literature reduced suicidal thoughts, bereavement, and posttraumatic stress disorder among their patients.⁵ In addition, patients who have experienced an NDE showed significant transformation in their spiritual and emotional lives, with many stating a renewed sense of meaning, existential awareness, and mystical experiences.⁷ Family and friends of patients who have experienced an NDE also reported increased comfort, hope, and inspiration.⁵ However, NDEs represent a growing paradigm shift beyond the naturalistic interpretations of science and medicine.

Naturalism has remained the dominant worldview in academia and Western culture, particularly within medicine and the sciences. Dating back to the ancient Greeks, naturalism proposes that the motions, properties, and interactions of atoms are sufficient alone to explain every aspect of the world and human life.⁸ As the philosopher W. T. Jones explained, “The world [in naturalism] is ... like a gigantic machine ... [in which] everything that occurs is ultimately explicable in terms of the properties and relations of the particles of which

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matter is composed.”⁸ Proceeding from the Greeks, naturalism remained in the background of philosophical discourse until the Enlightenment, where scientific discovery and political revolution were in full swing.⁸ With the rapid pace of scientific discovery, the naturalistic paradigm quickly engulfed the medical profession. Prior to the 20th century, medical practice focused largely on the diagnosis and treatment of illness from physical symptoms with little regard for the patient’s psychological, social, or spiritual affiliation.⁹ As Dr. George L. Engel wrote,

The seventeenth century paradigm is a system of thought in which scientists as objective observers are to regard nature as independent from themselves and unaffected by their act of observation. Developed as an approach to nature as it surrounds man, such a paradigm provides no means to accommodate human processes.... Accordingly, the physician has come to be seen as operating scientifically and medicine judged to be properly scientific only when dealing with bodily processes, not when dealing with patients as people.⁹

However, the 20th-century medical paradigm emphasized the holistic nature of the human person. In this view, the human person is viewed as an interrelated whole rather than as a mechanistic process determined only by physical laws.¹⁰ The new medical paradigm allowed for a greater appreciation of the complex environmental and social interactions influencing human health and disease.¹⁰ As with any philosophical or scientific view, new data or interpretations may counter or expand upon the prevailing views of the time, although existing paradigms may be inflexible toward adopting these changes.¹¹ The current paradigm shift is part of a larger academic movement *The New York Times* columnist David Brooks called “neural Buddhism.” As Brooks explained, “This new wave of research will not seep into the public realm in the form of militant atheism. Instead it will lead to what you might call neural Buddhism.... In unexpected ways, science and mysticism are joining hands and reinforcing each other.... We’re in the middle of a scientific revolution. It’s going to have big cultural effects.”¹² Overall, NDEs represent an exciting medical development toward

improving patient health and understanding of consciousness beyond naturalistic theories.

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