The year was 1978. A 13-year-old male adolescent was admitted to a pediatric emergency department with generalized weakness and repeated syncopal episodes. Serum electrolyte studies revealed a potassium level of 1.0 mEq/L and treatment was quickly instituted. The following dialog was relayed to the author by this patient several days later:

I was weak and dizzy for several days and my doctor didn’t know what was wrong, so he sent me to the hospital. I felt much better lying down, so in the ED my nurse made sure no one sat me up. One doctor must not have known this because he came into the room and sat me up quickly. The next thing I remember, I was floating near the ceiling by the corner of the room. At first, it was kind of scary. There was a lot of activity below me. One person began pushing on my chest, someone else put a tube in my throat. Metal paddles were put on my chest and I saw my body jerk a couple of times. I knew the doctors and nurses were really worried. I tried to tell them I was OK, but I couldn’t get their attention. I remember my nurse talking to me the entire time, which helped a lot. I made sure I thanked her afterwards. Later, when I was in the intensive care unit, several of the [ED] people came by to see me. Everyone seemed really surprised I called them by their name. Also, one doctor mentioned she lost something [reflex hammer]. I remember seeing her put it in a lab coat behind the door as I was watching them work on my body. She seemed even more surprised when she found it.

Exactly what happens at the point of death? This question has intrigued many since the beginning of mankind. What happened to this patient is known as an out-of-body experience (OBE, one characteristic of a near-death experience (NDE). Briefly defined, an NDE is an event in which a person experiences the world from a location outside his or her physical body. According to the International Association of Near-Death Studies, more than 13 million people in the United States have had an NDE.1 Those who have NDEs represent all races of people. All ages, all nationalities, and religions. Rich and poor, educated and uneducated.

Of patients who come close to death, it is estimated that between 35% and 40% could report an NDE.2 In children, this number may be as high as 80%.3 The term near-death experience in some ways is a misnomer. One of the most reliable triggers for an NDE is imminent death, but other events, such as meditation, childbirth, surgery, or a personal crisis, also can activate this experience.2 4

An NDE is a profound, life-changing event, yet many who experience it firsthand are reluctant to discuss it.2 4 5 Those with such experiences fear that close relatives, friends, health care professionals, and even religious leaders may be unsympathetic, skeptical, and label them “mentally disturbed.”2 5 The decision to disclose such a remarkable event is difficult.6 Recent media coverage has increased awareness about NDE phenomena; however, medical professionals are not well versed on the subject, and as a result, cannot adequately support the patient and family.7 This article discusses several facets of NDEs for the emergency nurse, including characteristics, aftereffects, proposed explanations, and implications for practice in the ED setting.

Characteristics of a near-death experience

When people come close to death, they have a remarkably similar experience. Although no two NDEs are exactly alike, there is a definite pattern. Common characteristics include an OBE, one characteristic of a near-death experience (NDE). Briefly defined, an NDE is an event in which a person experiences the world from a location outside his or her physical body. According to the International Association of Near-Death Studies, more than 13 million people in the United States have had an NDE.1 Those who
When the separation occurs, patients report they are out of their physical body, yet occupy a similar type of body made up of "energy fields" and "composed of light." Their new body is vigorous, healthy, and pain free. It is devoid of handicaps. One 70-year-old woman, who had been blind since the age of 18, described in vivid detail the resuscitation equipment and surprised the physician by telling him he was wearing a blue suit when he began the resuscitation.

Patients not only describe activities in the emergency department, but may "float" through walls and can describe occurrences in other parts of the hospital or even their home. One woman drifted into the waiting room and noticed her daughter was wearing mismatched plaids. Another watched as an emergency nurse in another room incorrectly broke a vial of medication and, after the resuscitation, cautioned the nurse to be more careful. The experiencer can see and hear events and sense how the medical team and their families feel. However, they cannot communicate in any way, which is frustrating.

Perhaps the most interesting study on OBEs was published in 1982 by cardiologist Michael Sabom. During a 5-year period Sabom interviewed 32 patients who claimed to have had an OBE during a cardiac arrest. He found these individuals had specific recall of events during their resuscitation. Were these simply educated guesses? To answer this, Sabom designed a study involving a control group consisting of 25 "seasoned" cardiac patients with an average duration of known heart disease exceeding 5 years. The 25 patients were matched to the OBE group for age, sex, race, and other variables. He then invited the seasoned cardiac patients to visit a cardiac unit to observe how medical procedures (i.e., cardiopulmonary resuscitation) and equipment (i.e., monitors and defibrillators) worked. Sabom even made sure his control group were regular television watchers. His rationale for these actions was to determine whether the specific details recalled by the OBE group could be accounted for by general prior experience, for example, medical television dramas or exposure to life on cardiac units. Sabom then extensively interviewed the control group about resuscitation procedures.

Sabom found that the majority of his control group (96%) made significant errors regarding specific points during resuscitation. For example, 20 of 23 questioned about cardiopulmonary resuscitation made at least one major error, the most common being the belief that mouth-to-mouth resuscitation made at least one major error, the most common being the belief that mouth-to-mouth resuscitation is the method of choice for artificial ventilation. Others thought a blow to the back or stomach would restart the heart. Some thought the defibrillators had suction cups on their bases. In sharp contrast, there were no such errors regarding resuscitation techniques in any of the 32 patients who claimed to have had an OBE. Thus Sabom's OBE group was not making educated guesses as he originally suspected. In some way, they accurately perceived what was happening to them during the resuscitation, despite being unconscious.

Travel through a tunnel
Once a person has gone through the initial shock of an OBE, he or she may enter a "dark vacuum" or "tunnel." Most report being propelled through a dark void at an incredibly fast rate of speed toward an intense light. They may hear loud noises, buzzing or hissing sounds, bells, or music unlike anything they have ever heard. Some patients go up a staircase instead of through a tunnel. One child, dying of lung cancer, put his mother's mind at ease when he told her he thought he was going to go up a beautiful spiral staircase. The descriptions vary greatly, but the sense of what is happening remains the same: the person is drawn through some type of passageway toward an intensely bright light.

Meeting a Being of "Light"
At the end of the tunnel, patients talk about an indescribably brilliant "Light," the brightest, most beautiful light they have ever seen. The Light is often referred to as a religious figure or a Supreme Being, such as God, Jesus, or Buddha, conveying cultural overtones in those with a religious background. The Being of Light radiates peace, serenity, understanding, and unconditional love. It has a distinct personality and even possesses a keen sense of humor. Most people want to be with it forever. Communication with the Being of Light is similar to telepathy—knowledge and information are transmitted freely without speaking. The presence of the Light often dominates discussions after an NDE and is a very common feature in children.
most rigid atheist believes in a supreme spiritual being after this experience.  

The “life review”
Adults, and occasionally children, report a moment of startling intensity during which the Being of Light presents them with a color panoramic review of their life. Every action in their life, from the most insignificant to the most meaningful, is there for them to evaluate. During this chronologic instant replay, they begin to understand the effects of their actions on others, both good and bad. In fact, they become the recipient of their actions. For example, one woman saw herself as a child taking candy from her sister’s Easter basket and experienced firsthand the sadness her sister felt. Throughout the review, the Being of Light helps the person incorporate the experience into his or her life. The result is a strong belief that the most important thing in life is love and genuine caring about others.

Encountering others
Many patients report being met by others, sometimes deceased friends or relatives, during the course of this experience. These beings are also composed of light and radiate an intense luminescence that seems to permeate everything and fill the person with love. Children are often accompanied by guardians or “angels” during their visit. One 10-year-old stated the people he met were glowing from the inside like “lanterns”; he sensed they loved him very much. Others report meeting deceased friends and relatives.

Reaching a boundary or border
Many people notice that during the NDE they seem to approach a boundary or border of some type. This boundary takes on many forms—a beautiful valley filled with flowers, body of water, door, mist, or simply a line. Instinctively, they know crossing over this border means they would stay forever.

Returning
For many, the NDE is such a pleasant event that they have little desire to return. Some are told by the Light or by others that they must return because there is more work to be done. Others are given a choice. Most do not recall entering their body. Many are reluctant to return and, in fact, may be quite angry at the medical team for resuscitating them. Depression may follow.

The dark side
Thus far, the discussion of NDEs has been generally positive. This, however, is not always the case. A 1962 poll by the Gallup Organization estimated the incidence of negative NDEs to be less than 1%, although the true incidence is unknown. Cardiologist Maurice Rawlings discusses those who enter a different type of sorting ground—one that is morose and dark, similar to a carnival’s “spook house.” He suggests that with the passage of time good experiences are mentally retained, but bad experiences are rejected or repressed, a theory that, to date, has not been proved.

Greyson and Bush found that negative NDEs fall into three distinct groups. In the first group, the person experiences the OBE, tunnel, brilliant light, and other common positive characteristics; however, these are interpreted as frightening, thus the experience is perceived as negative. In the second, the person experiences a vast void or blackness surrounding them, which is described as terrifying. And finally, in the third, the experience is similar to those described by Rawlings. It is important to note that negative experiences tend to be just as transforming to the experiencer as positive ones, an area discussed below.

Aftereffects of an NDE
There is one common element in all NDEs that is currently the focus of many studies. Simply stated, NDEs transform the people who experience them. Researchers find deep, positive, measurable personality transformations as a result. Common changes include a renewed interest in, and appreciation of, life and nature. There is a sense of connection with all things, although this is a difficult concept to define further. Material wealth is no longer important. Priorities change, sometimes drastically. Family and friends, a desire to learn, and spiritual growth assume great importance. Love is by far the most important.
part of life. The type A personality vanishes, to the
delight of many spouses and significant others.
Husbands and wives often remark that their mate is
"a much nicer person now." Many embark on a new,
service-oriented career after returning, such as nurs-
ing or teaching.

While mapping the area of
the sylvian fissure, located
in the right temporal lobe,
Penfield was astonished
to find that several NDE
characteristics were
recreated. Patients reported
they were "half in and half
out" of the body, traveling
through a tunnel, or seeing
decreased friends or relatives.

Sutherland notes several other changes in
lifestyle for the person who experiences an NDE that
are not typically discussed, including decreased alco-
hol consumption, decreased tobacco use, and
decreased use of prescription drugs. Also noted is a
decrease in television viewing and use of newspa-
pers, because of a feeling that neither of these media
is a particularly healthy way in which to view the
world. On the other hand, an increase in exercise pat-
terns is seen over the years. Alternative therapies,
such as acupuncture, herbs, and homeopathy, are
favored over traditional medicine.

Another significant change for those who have
NDEs is that they no longer fear death, a uniformly
positive finding. Despite their confidence about an afterlife, though, the person with an NDE is
in no particular hurry to "cash in" on his or her cur-
rent existence. Suicide is not an option. The message
is clear—"Your life is a gift." It appears for some that
the loss of the fear of death can be transferred to oth-
ers. For example, those who have had NDEs may not
grieve at the death of a close friend or relative at a
funeral. In fact, they may experience a sense of peace
and joy for the deceased individual, not sadness.
Those who have had NDEs have a great desire to
work with the elderly, the grieving, and the dying.

Research also focuses on other aftereffects of
an NDE, such as an increase in psychic phenom-
ena. Persons who had NDEs often report

experiencing an increase in one or all of the follow-
ing: clairvoyance, telepathy, precognition, déjà vu,
supernatural rescue, intuition, dream awareness,
OBEs, and healing abilities. Some of these
psychic abilities can be absorbed into daily life and
are accepted as normal (clairvoyant episodes, pre-
cognition), whereas other experiences, such as
OBEs, are more difficult to incorporate.

Although an NDE can enhance one's life, it also
can be distressing. Some experiencers have prob-
lems readjusting to life afterward, which may offset
the positive personality transformations. They
report significant strains in close relationships and
divorce may be more prevalent, especially when a
spouse does not want to listen or understand what
happened during the NDE.

Explanations

Despite extensive research, no one theory explains all
elements of an NDE. As mentioned earlier, what
occurs during an NDE is not inherently associated
with death or the transition into death. Proposed
explanations include hypoxia, hypercarbia, drugs,
hallucinations, mental illness, and neurophysiologic
activity in the temporal lobe.

Earl Rodin, a neurologist who had an NDE him-
self, concluded that his experience was simply the
result of an oxygen-starved brain. He believed that
hypoxia was the final common pathway of death.
However, Sabom demonstrated that hypoxia alone
was not the cause. He used continuous arterial mon-
toring and found that some patients in cardiac arrest
had higher, not lower, levels of oxygen. Hypercarbia
was ruled out with the same technology.

Drugs are also not likely to be the sole cause of
NDEs. Morse and Perry found the most profound
NDE occurs in patients receiving the least amount of
medication, although this was an incidental study
finding. It is important to note that drugs often distort
one's perception of the environment, whereas those
experiencing an NDE have a clear picture of events.

At worst, an NDE is a form of mental illness,
such as schizophrenia or organic brain syndrome,
requiring intense psychotherapy. During a schizo-
phrenic episode, patients are tormented by voices
and chaotic, fragmented thoughts that have a debil-
itating effect. They are unable to relate meaning-
fully to others, and the course of the illness is a
downhill spiral. In contrast, those who have NDEs
are quite coherent and more, not less, likely to func-
tion in the world. The NDE is an experience of
growth, with an increased, not decreased, capacity
to enjoy life.

Approximately 50 years ago, neurosurgeons
Wilder Penfield performed a surgical procedure
Table 1
Suggestions for emergency nurses in dealing with patients who may have had a near-death experience

- Become knowledgeable about the near-death experience. Encourage peers and other medical professionals (physicians, prehospital, social workers) to increase their knowledge as well. Promote hospital-wide NDE education.
- Always touch and talk to the patient during a cardiac arrest.
- Encourage family members to be with the patient during the resuscitation.
- After resuscitation, encourage the person to talk freely about his or her experience. Be alert for subtle clues (i.e., dreams, drawings). Do not rush the patient. Allow silence.
- Define experience to patient. Reassure him or her that he or she is not alone.
- Offer education and support. Literature and support groups are available.
- Include the family members. They need to be supportive of the experience and aware of possible personality changes in family member.
- Develop a support group if not available in area.
- Encourage patients to meet with others who have had NDEs.
- Develop procedures for long-term follow-up of the patient and family.

known as "brain mapping," which consisted of electrically stimulating different areas of the brain and documenting what happened to awake patients sedated with local anesthesia. While mapping the area of the sylvian fissure, located in the right temporal lobe, they were astonished to find that several NDE characteristics were recreated. Patients reported they were "half in and half out" of the body, traveling through a tunnel, or seeing deceased friends or relatives. A number of neurologists have speculated that NDEs involve the same neurophysiologic activity that occurred in the patients described by Penfield and Rasmussen. However, this does not explain how patients can give detailed descriptions of resuscitation procedures, at least some of which could not have been witnessed from the vantage point of their body, even if they were conscious.

Implications for emergency nurses

Why is it important for the emergency nurse to be educated and sensitive about NDEs? Research suggests that although medical professionals' knowledge of NDEs is only vague and that there is a good deal of misinformation, a compassionate, informed emergency nurse can be instrumental in recognizing that this event may have occurred and help the patient positively integrate the experience into his or her life (Table 1).

Death is often viewed as the enemy, particularly in the ED setting, and attitudes toward death, dying, and NDEs are not well addressed by the medical community in general. Corcoran strongly encourages all medical professionals to become more knowledgeable about this experience and share their knowledge with colleagues.

In the event of a cardiac arrest, emergency nurses cannot assume that the patient cannot see, hear, or feel, simply because he or she is unconscious. A team member should be stationed at the patient's head and provide ongoing, simple explanations about procedures. It is also vitally important to encourage the family to be present during a critical event. In 1994 the ENA passed the "Family Presence Resolution" formally advocating for family members at the bedside. This resolution demonstrates sensitivity and insight into the needs of both the patient and the family. Family members can be active, supportive participants simply by holding the patient's hand or foot. Many patients who have NDEs report that it was the family member who kept them "grounded," encouraging them to return. Emergency nurses should take steps to ensure that policies are in place to allow for family presence.

When the patient becomes more alert, he or she should not be left alone after a cardiac arrest for at least 4 hours or until he or she is oriented to person, place, and time. Often the patient may be transferred to a critical care unit during this time, but on occasion, a prolonged ED stay may occur. During this time the emergency nurse should be alert for subtle signs of an NDE. Patients may mention that they had a very "odd experience" or "wild dream." If an endotracheal or nasogastric tube is in place, the patient may want to write down a message or note. As the physical condition of children improves, they may draw a picture depicting the event. Many patients want to discuss this unique experience further, but are not quite sure how to proceed. A supportive, non-judgmental environment is crucial. Open-ended questions or comments encourage dialog. Some
examples are, “Do you remember anything about your illness earlier today?” or “People who have had a crisis similar to yours sometimes have unusual experiences. Is there anything you would like to talk about?”

Encourage patients to express their emotions and discuss the NDE at their own pace, do not interrupt them. Stay silent when the speaker is silent and resist the urge to hurry the story. Remember, disclosure is very difficult. If someone does divulge that he or she had an NDE, it would be helpful to chart it, so that other staff can support the patient appropriately.

Patients who have NDEs may feel alone and confused after the crisis. The emergency nurse can help in several ways. First, tell them what the experience is—an NDE. Simply knowing that there is a clinical name for the episode may help. Second, reassure patients that they are not alone and that the experience is quite common. Bibliotherapy, a form of therapy where patients read about their symptoms, may also be helpful. The hospital library can serve as an excellent resource, if adequately supplied with paperback books and journals, at a nominal cost. An additional resource is the International Association of Near-Death Studies, which disseminates information and sponsors support groups across the country.

One frequently overlooked aspect of the NDE is the effect an NDE has on the patient’s family. Family members should be educated and counseled on after-effects. Often these are positive, but as noted, can be a significant source of stress, particularly when there is a radical change in the patient’s personality.

The NDE can be thought of as an enchanted journey. Those who have NDEs are not the only ones to reap their benefits. One author notes that those who read the literature reports and take an interest in NDEs also begin to experience similar, positive changes in their own lives. Empathy and understanding will enhance your patient’s life and, hopefully, yours as well.

References