

# Nourishment or Punishment: Nutrition support towards the end of life

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## Abstract

Artificial nutrition support during the end-of-life is deemed non-beneficial. Withholding nutrition when the patient is near death is a controversial and ethical dilemma that families and healthcare workers face. For family, feeding is a source of showing love and affection to loved ones and it is distressing for them to see their loved one die painfully with hunger and thirst. Therefore, healthcare workers need to counsel families regarding the benefits and drawbacks of artificial nutrition toward the end of life. The family must be taught about alternative means of comfort for patients like mouth care, offering back massage, or moistening lips to interact with patients during end-of-life.

## Keywords

End-of-life, withholding nutrition, feeding, patient

## Introduction

Feeding and administering fluids are directly related to the fundamental ideals of caring held by humans (Van De Vathorst 2014). The family wrestles with moral and ethical dilemmas when deciding whether to continue feeding or keep the patient on “nothing per oral” status. Although starvation or dehydration during the dying phase usually assists the patient to pass away comfortably, the morality of withholding nutritional support is still a controversial topic. The family often believes that feeding provides comfort and relieves the pain and suffering of the patient. The idea of painful death due to hunger or dehydration results is a normally held perception as well as the assumption that nutrition ought to be achieved through all feasible means. This should only be done if nutrition is beneficial to the patient, but if it is a source of harm, then administering nutrition, particularly through potentially dangerous invasive procedures like a gastrostomy tube, is useless and unethical.

When a patient is towards the end of life, the focus of care is to preserve the quality of life and to reduce the suffering instead of potentially causing harm through reinforcing nutrition. In such a situation, the goal should not be to fulfill the nutritional requirements of the patient but rather to ensure comfort and a peaceful death. End-of-life nutritional support is usually a futile medical intervention that does not benefit a patient and may increase the financial burden on the family. Nutrition therapy should only be considered if it is fulfilling the therapeutic needs of the patient like extending life, if this can be done without prolonging suffering and pain, or retaining

the physical functioning of the patient – usually a goal when it is uncertain if the patient has truly reached the end of life.

## **Ethical implications of nutritional support during end-of-life**

The ethical principle of beneficence means providing benefits to others and balancing benefits and risks or harm (Jahn, 2011). End-of-life nutrition should only be provided if it is fulfilling the purpose of improving the quality of life (Carter 2020). The intensity of the therapy and associated risks must be taken into account, and if it proves ineffective, then the family should be counseled about the drawbacks of continuing this futile medical care so they can make an informed decision.

The ethical principle of non-maleficence means it is forbidden to hurt, injure or increase the suffering of others (Jahn, 2011). As the patient approaches death, forcing natural or artificial feeding worsens his suffering by inducing bloating, nausea, and stomachache due to decreased metabolic activity (Dev, Dalal, and Bruera 2012). In contrast, the ketones and opioid peptides produced during starvation generate sedative and analgesic effects, increasing the comfort of the dying patient (Sutcliffe and Holmes 1994). When considering nutrition support in a dying patient, it is critical to consider the fact that the body is about to shut down as a result of the dying process. Following this, nutrients are no more digested as efficiently as earlier, and patients typically do not feel hungry or thirsty. Nutrition support at this stage also may further extend a painful dying process (Carter 2020). Hence, providing nutrition to the dying patient is futile medical care that worsens the patient’s suffering, increases the financial burden on the family, and violates the principle of beneficence and non-maleficence.

## **Feeding, a way of showing care and affection**

The family of the dying patient is more concerned about the nutritional needs of the patient, as it is difficult for them to witness their loved one dying by starvation or dehydration, and therefore, they tend to reinforce artificial nutrition.

Feeding is a way of showing care and concern and culturally it is a part of “basic care” (Cardenas 2021). It provides an opportunity for a family to interact and strengthen their bond with the patient. The first two components of Henderson’s Nursing Need theory also emphasize that food and water are the foremost needs of a person and nursing care must revolve around meeting those needs to ensure recovery or peaceful death (Ahtisham and Jacoline 2015). Maslow’s hierarchy of needs also supports the fact that food and water are fundamental physiologic needs that are necessary for survival (Hayre-Kwan et al. 2021). Hence, the significance of feeding from the perspective of the family of a dying patient cannot be denied.

## **Withholding nutrition to prevent distressing death**

Despite the significance of feeding from the family’s perspective, we believe that nutritional support should not be provided at this stage, based on the principles of beneficence and non-maleficence. The use of artificial nourishment in the terminal and dying stages may pose a health risk, including infectious, pulmonary, and metabolic disorders that can increase patient suffering, and be a source of financial burden for the family (Van De Vathorst 2014).

The caregiver must withhold the therapy if, for a particular patient, the risks of receiving it override any potential benefits. Nutrition therapy should be discontinued if it is ineffective and simply serves to prolong misery or the dying process. A recent French study focusing on patients

with metastatic esophageal and stomach cancer who died between 2010 and 2013 found that more than 15% of the patients received artificial nutrition in the final week of life, whereas the French Society of Clinical Nutrition and Metabolism recommends artificial nutrition only in patients with a life expectancy of more than 3 months (Kempf et al. 2017).

Moreover, people in their later stages of life usually have little interest in food or water. The meal may not taste good, they may have difficulty swallowing or digesting it, and they may not be hungry. Lack of appetite and loss of interest in eating is part of the physiological process of dying (Jones 2010). Therefore, the focus of care towards the end of life must be on comfortable death rather than burdening the patient with discomfort through forceful nutrition.

Additionally, hunger and thirst result in the release of endorphins and generate sedation that comforts patients toward the end of life. Patients with a comatose or brain death condition often do not experience hunger or thirst due to the absence or significant reduction in neuronal function in the brain. In brain death patients, since the brain is no longer functional, the signals that normally initiate the sensations of hunger and thirst cannot be generated. In comatose patients, there is a significant reduction in cerebral metabolism and neuronal activity. This reduction in brain function may result from various causes, such as traumatic brain injury, stroke, or anoxia (lack of oxygen). The reduced brain activity in comatose patients is similar to the state observed during general anesthesia, where consciousness is temporarily suspended. Patients in a persistent vegetative state (PVS) have severely impaired consciousness but retain some basic involuntary functions, such as breathing and digestion. However, the higher cognitive functions, including the awareness of hunger and thirst, are absent or severely diminished. Therefore, like brain-dead and comatose patients, individuals in a PVS do not exhibit sensations of hunger or thirst (Kozeniecki, et al. 2017).

Ketosis and dehydration could be protective mechanisms against potentially painful symptoms of dying in conscious patients. Ketones, which are produced when the body metabolizes fat instead of glucose during fasting or starvation, have been found to possess anesthetic properties. Some experts believe that fasting may also increase the release of endorphins, which are natural pain-relieving chemicals produced by the body (Kozeniecki, et al. 2017).

Similarly, dehydration, which is characterized by reduced fluid levels in the body, can lead to hyperosmolarity (increased concentration of solutes in the blood), azotemia (elevated levels of nitrogenous waste products in the blood), hyponatremia (increased sodium levels in the blood), and hypercalcemia (increased calcium levels in the blood). These changes in blood chemistry are associated with sedative properties, meaning they can induce a state of calmness and reduced arousal, potentially contributing to a less distressing experience for conscious patients during the dying process (Kozeniecki, et al. 2017).

Interventions for patients during the dying phase should focus on making them as comfortable as possible. Family counseling is an essential aspect during such situations. To enable the family to make an informed decision, the benefits and drawbacks of artificial nutrition should be thoroughly explained. Healthcare workers must possess effective communication skills and use them to establish and maintain open and honest end-of-life care planning conversations with patients and families. This might assist identify and resolve any misconceptions the patient or family members may have about artificial feeding and hydration. In addition to that, awareness regarding alternative forms of nourishment, conversation, frequent mouth care, hygiene care, positioning, moistening patient's lips, loving touch, gentle massage, reciting prayers, or religious verses, and other acts of caring and love, should be encouraged, allowing

the family to participate in the patient's care (Bozzetti 1996). To ensure patient comfort and alleviate the symptoms of dry mouth and thirst, ice chips, popsicles, and artificial saliva, can be administered. In addition, petroleum jelly, water-based lubricants, or lip moisturizers can also be used to moisten the lips.

## Conclusions

The general purpose of artificial nutrition and hydration is to maximize nutritional status and maintain fluid balance when a medical condition limits appropriate oral intake. For all patients, the biological justification of any intervention to address the underlying medical condition must be evaluated. Advantages must be balanced against potential hazards and filtered via the patient's beliefs, goals of care, quality of life, and financial means. When nutritional support is judged to be inappropriate, this must be patiently explained to the family, along with counseling regarding alternative means of comfort to interact with the patient and be involved in patient care.

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