

Review article

Artificial nutrition and hydration

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Abstract

Hydration and nutrition are essential for the maintenance of life. Discontinuation of artificial support can result in distress for patients, family members, and healthcare providers.

Proponents of maintaining hydration argue that hydration is a basic human need and can reduce and prevent dehydration-induced delirium, opioid neurotoxicity, and/or fatigue in terminally ill patients. Opponents have argued that parenteral hydration is burdensome and prolongs the dying process. Islamic law does not allow the withholding or withdrawal of basic nutrition because this would result in death by starvation. Terminal patients should continue receiving nutrition, hydration, and general supportive care without discrimination.

Key words: Nutrition, hydration, end-of-life, ethics, Islam

International Journal of Human and Health Sciences Vol. 01 No. 01 January'17. Page : 18-21

Introduction

In patients at the end of life (survival days or weeks), artificial hydration and nutrition pose clinical, ethical, and logistical dilemmas in the Western culture resulting in debates for and against such interventions.¹ Currently, there are differences in perceived benefits of artificial nutrition/hydration between healthcare providers and the general public.² Wide variations in practice patterns exist depending on the setting (inpatient versus hospice); culture. A qualitative study examining the attitudes of healthcare providers regarding artificial nutrition and hydration at the end of life, compared the different attitudes of physicians from Australia with Dutch doctors. The Dutch physicians often take primary responsibility for providing artificial nutrition and hydration while the Australian doctors are more likely to let the patient's family make the decision.³ Consequently, communication provided by healthcare providers about artificial nutrition/hydration is inconsistent which may cause confusion for patients and family members. Patients and family members are often not involved in the decision-making; and when involved, their decisions are influenced by their physicians' recommendations.⁴

Although discussions about withholding or withdrawing of life-sustaining treatments often include decisions about stopping or never starting

artificial nutrition and hydration (ANH), feeding issues continue to be among the most emotional and value laden for patients and families. The decisions are often considered separately from decisions around the use of

'machines'. The ethical decision-making process is difficult when considering the risks and benefits of feeding tubes in patients with advanced dementia.⁵

The majority of terminally ill patients will derive no clinical benefit from parenteral nutrition, with some exceptions that include patients with a good functional status and a nonfunctional gastrointestinal tract or a slow growing tumor.¹ Dehydration in turn can cause or aggravate pre-existing symptoms such as fatigue, sedation, and delirium. Withdrawal of nutrition and hydration, on the other hand, causes physiological responses which are, at the very least, unpleasant for those caring for the patient to witness.^{6,7} A 2016 study out of Taiwan suggests caregivers often prefer life-sustaining treatments more so than patients; it is suspected that caregivers tend to feel guilt over 'not having done enough' for their parents.⁸

Arguments for hydration state that hydration provides a basic human need, provides comfort and prevents uncomfortable symptoms: confusion, agitation, and neuromuscular irritability, prevents complications (e.g. neurotoxicity with high-dose

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narcotics),relieves thirst, and provides minimum standards of care; not doing so would break a bond with the patient.

Those arguing against hydration state that intravenous therapy is painful and intrusive , it interferes with acceptance of the terminal condition,prolongs suffering and the dying process, and lead to less fluid in the gastrointestinal tract with less vomiting, and less pulmonary secretions and less cough, choking, and congestion.¹

There is scarcity of scientific evidence to support either approach, with only a few prospective or randomized controlled trials conducted in patients at the end of life. Controlled clinical trials addressing the potential symptomatic and survival benefits of artificial hydration are difficult to conduct because of methodological and ethical reasons.

Consensus statements from both the American Geriatric Society and the American Academy of Hospice and Palliative Medicine (AAHPM) do not recommend feeding tubes in advanced dementia, and instead recommend oral assisted feeding. However, both professional societies stressed the importance of respecting cultural beliefs and having high-quality patient-centered meetings. They recognize families will consider ANH as basic sustenance for faith-based, cultural, and personal reasons, and these views should be explored, understood, and respected.^{9,10}

The American Society for Parenteral and Enteral Nutrition's (ASPEN) position paper emphasize that, although from scientific, ethical, and legal perspectives there should be no differentiation between withholding and withdrawing of ANH, withdrawing is more emotionally laden than withholding, especially within specific cultures. It recommends learning relevant religious positions and cultural attitudes one will encounter in the regional population.⁵

The decision about withholding and withdrawing artificial nutrition and hydration include the clinical course of the disease, religious beliefs, cultural identity of the patient, family, and healthcare provider, the cost of treatment, legal, ethical and moral issues.^{11,12}

Case #1:

Mrs F 82 years old, is in a nursing home, where she exists in a near-vegetative state. She had previously worked as a nurse for many years, caring for patients with Alzheimer's disease. Before being diagnosed with the disease herself, she had stipulated in a written advance directive

that she be allowed to die if she was ever in a state of advanced dementia. In spite of this, the facility's nurses and care aides were instructed to continue to give her food and fluids, as doing otherwise would constitute neglect. When challenged by her daughter, the facility argued that Mrs F opened her mouth when being fed, which they saw as a sign that she wanted food. They rejected the notion that this could be a reflex action. Mrs. F's daughter filed a lawsuit arguing that this continued feeding constituted battery.¹³

Case # 2

An 89-year-old woman with vascular dementia lives in a nursing home. She is able to walk, talk, and feed herself, but needs assistance with dressing and toileting. She is transferred to the hospital for a large ischemic stroke; MRI confirms diffuse hypoxic brain injury. Four days later, she withdraws to pain, has unintelligible speech, does not respond to commands, but has corneal and gag reflexes. Being unable to swallow, a nasogastric tube is placed for nourishment in her. Her son, the healthcare proxy, is hopeful she will return to her previous state, wants aggressive resuscitative efforts, and is adamant that a percutaneous endoscopic gastrostomy (PEG) tube be placed; otherwise, his mother will starve. Her primary team is concerned that a PEG will not achieve the son's goals for the patient.⁵

In both cases an ethical conflict between the patient's proxy and the primary team exists. In the first case, the patient's daughter is refusing feeding while in the second case the son is demanding the tube feeding.

Islamic view

A recent position paper of the American Society for Parenteral and Enteral Nutrition advises respect for the religious, ethnic, and cultural background of patients and families 'to the extent it is consistent with other ethical principles and duties'. However, little data is found in the English literature about religious and cultural attitudes regarding the ethics of withholding and withdrawing artificial nutrition and hydration, apart from Jewish and Catholic perspectives.^{14,15}

The prophet Muhammad (PBUH) discouraged forcing the sick to take food or drink. However, Muslim families tend to express great concern when the nutritional intake of a patient is jeopardized. Some Muslim families may demand for a medical intervention to compensate for this decreased nutritional intake. Reference to the teachings of the Prophet (PBUH) on this

matter may alleviate the concerns of families and facilitate their understanding of the anorexia/cachexia syndrome associated with malignancy, for example. However, in patients who are slowly deteriorating, one should maintain the required amount of nutrition and hydration until the last moment of life.^{16,17}

In Islam, nutritional support is considered a basic care and not a medical treatment, and it is a duty to feed people who are no longer capable of feeding themselves.¹⁵ Islamic law therefore does not allow the withholding or withdrawal of basic nutrition because this would result in death by starvation, which is a crime according to Islamic law and contrary to both the fundamental importance of the sanctity of life and the duty to provide nutrition to a fellow Muslim.¹⁶

If hydration and feeding is stopped, the patient will suffer from dehydration and hunger for 10-14 days, and it would be more humane to inject him with a medicine that will let him die in seconds rather than torturing him for 2 weeks. However, this is considered Euthanasia which is emphatically prohibited by Islamic Jurists.¹⁷

The Islamic Medical Association of North America (IMANA) states that: “when death becomes inevitable, the patient should be allowed

to die without unnecessary procedures. However, no attempt should be made to withhold nutrition and hydration.¹⁸

The Saudi Council for Health Specialties has advised that “intravenous fluids and nutrition should not be withheld from a patient who cannot otherwise be fed normally, regardless of the nature of his disease or its duration.”¹⁹ In a prolonged terminal phase, active disease treatment may be determined to be medically futile and patients are transferred to palliative care where they receive nutrition, hydration, and pain control, as well as social and psychological support.²⁰

Conclusion

Discontinuation of artificial nutrition or hydration result in distress for patients, family members, and healthcare providers. Research showed no clear benefits of parenteral hydration on symptom burden or survival for terminally ill patients. However, dehydration can cause or aggravate pre-existing symptoms such as fatigue, sedation, hunger and delirium. The Islamic view on this subject is that nutrition and fluids should not be withheld from a patient who cannot be fed normally, regardless of the nature of the disease or its duration.

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