



Culture, demographics, and critical care issues: an overview

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Give me standard patients and I'll practice standard medicine.

(James S. Todd, MD AMA Executive Vice President, 1990–1996)

Do Chinese feel the same kind of pains as Americans? Even if an Anglo-American has a headache, is the meaning the same as when a Chinese person says he or she has a headache?

(Rod Moore and Inger Brødsgaard, 1999)

The last 20 years have been characterized by a dramatic change in the demographics of the United States of America (USA). According to the latest census figures [1], the total population of the USA grew by 13.2% in the 10 years between 1990 and 2000. During the same period, the population of Hispanics grew 57.9%, Asians grew 48.3%, American Indian and Alaskan Natives grew 26.4%, Blacks or African-American grew 15.6%, and Native Hawaiian and other Pacific Islanders grew 9.3%. From another perspective, while the race of the majority, Caucasian (White), grew 5.9%, other races and ethnicities accounted for 42.7% of the total population growth. As it has been in the past, the USA continues to be a country of immigrants with an ever-increasing diversity of cultures represented by a multitude of nationalities, ethnicities, beliefs, customs, and religions. Although such diversity is arguably at the root of the richness and strength of the country, it also presents major challenges to critical care physicians and providers who increasingly have to deal with patients from a broad spectrum of cultures. These patients are often nonresponsive (eg, comatose), nonverbal, or unable to communicate verbally (eg, intubated), do not speak English, or communicate through body language that is not compatible or comprehensively across cultural barriers, or through instruments that may be culturally inadequate for the purposes intended. As an example, a first-generation Hispanic woman, 49 years old, who had arrived recently from her native country, was admitted to the emergency room with acute appendicitis. When a nurse asked

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her to describe her pain by using a psychometric pain scale (Wong-Baker FACES Pain Rating Scale), the woman, in obvious pain, could hardly be heard saying: “four.” After her release from the hospital 5 days later, she was asked about her earlier response, and she said: “I knew that I was in pain—worse than giving birth—but isn’t that expected from a person suffering appendicitis? She also admitted during the discharge process that in her mind pain ratings between 5 and 10 were more appropriate for describing situations such as “open wounds,” third-degree burns, or some other type of injuries such as those resulting from “accidents.” It is noteworthy that this was the first time that this patient had seen the pain scale, and was unfamiliar with the metrics associated with the instrument. Fortunately, an alert health care professional was able to read beyond the patient’s interpretation of her pain and triage her appropriately.

As is discussed later in this article, pain, its meaning and interpretation, are frequently the source of misunderstanding between patients, their families, and health care providers. In some cultures pain is considered part of the healing process, while in others, pain is sought to purify and prepare the soul for its ultimate trip to eternity. How pain is withstood also depends on the cultural background of the patient. Some groups tend to be stoic, while others are very sensitive to pain. Some will take traditional medications and herbs, while others are open to accept precepts of modern pain therapy. The female patient mentioned in the previous paragraph refused to take morphine to control her pain. Instead, she requested Ibuprofen. She argued that morphine was addictive, and used frequently by “persons of questionable character.” One should note that in the culture where this patient comes from, persons like her, with a college degree and financially secure, are not supposed to be involved in the consumption of “hard drugs.” Fear of addiction may also prevent these patients from accepting narcotics and other similar pain-management medications.

Another issue that critical care providers must often deal with has to do with patient autonomy, informed consent, and end-of-life decisions including autopsies and organ transplantation. In countries such as the USA, Sweden, and The Netherlands, where individualism prevail over collectivism, decisions regarding “Do Not Resuscitate” (DNR), organ donation, and postmortem body dispositions are left to the discretion of the patient, and these decisions are often protected by law(s). In contrast, in countries and cultures that are collectivists, these decisions are frequently made by persons other than the patient. For instance, Sonnenblick, Friedlander, and Steinberg [2] noted that in the early 1990s in Israel there was no legal validity to a living will, and that no patient in their study had such a document. The decisions of the patient’s offspring often included exhaustive means of life support, and did not always comply with the patient’s stated wishes. It is reasonable to assume that patients and families coming from countries with low Individualism Index (*vide infra*) present the most challenges to critical care providers. In the notion of families in Asian Pacific cultures, the oldest son, representing the family, is charged with the responsibility of preserving and prolonging the parent’s lives. A child’s

parent, might be considered dishonorable to the community or other members of the family [3].

Religion also plays an important role in issues regarding DNR, organ transplant, and end-of-life matters. When does death occur? Will the body reincarnate? What happens to the soul after death? These questions, of transcendental interest to humans, have different answers that are rooted in the cultural and religious beliefs of people. For instance, most Buddhists believe that life ends when the heart stops, rather than when brain activity ceases.

It has been documented that patients prefer and respond better to physicians and health care providers that are from their same ethnicity [4,5]; however, this is an accommodation that may be difficult to arrange in an emergency or critical care situation due to personnel availability constraints. It is particularly important to ethnic minority patients and families to trust their physicians. Minorities in the USA are known to distrust the health care system that is supposed to treat them. Recent publications highlighting the Tuskegee Experiment in the 1930s have had a devastating effect, particularly in the African-American community, in the USA [6]. In the article *Under the Shadow of Tuskegee: African Americans and Health Care*, the author, Vanessa Northington Gamble [7], writes: “African Americans’ beliefs that their lives are devaluated by White society also influence their relationships with the medical profession. They perceive, at times correctly, that they are treated differently in the health care system solely because of their race, and such perceptions fuel the mistrust of the medical profession.” Such attitudes are made evident in cases such as that reported by Galanti [8], where a Black male, 68 years of age, scheduled to have his cancerous prostate removed, became suspicious and reluctant to have the procedure without fully exploring other forms of alternative treatment. On a conversation with his nurse he stated, “. . . I just don’t know if I trust the hospital to take care of me. I have older friends who were subjected to government testing without knowing it back in the 40s and 50s.”

In his inaugural address as the 101st president of the National Medical Association, Rodney G. Hood [9], points out to “disturbing racial bias [in the treatment and medical decision making affecting African Americans and other medically underserved communities.]” Hood also alludes to articles published during 1999 and 2000 in *The New England Journal of Medicine* that puts into evidence disparities and racial biases in the health care of minorities. Such cases include the “Lung Cancer Sloan-Kettering Study,” the “Renal Transplant Harvard Study,” the “Georgetown University Cardiovascular Study,” and the “Emory University School of Medicine Emergency Room Study on Pain Treatment,” and in all cases the evidence seems clear that Blacks received less quantity and quality services than their Caucasian counterparts.

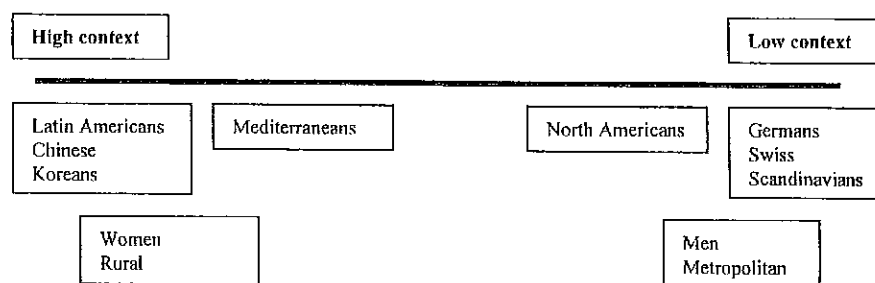
Understanding culture and its impact in shaping human behavior might be the key to improving the quality of services offered to patients, especially those in critical care units. Physician recognition of the cultural context of the patients can be essential to a successful therapeutic relationship [3]. It might also reduce the stresses and tensions that can arise when health care providers and patients of different cultures interact.

Culture: definitions and implications to critical care

Culture has been defined as the patterned behaviors and mental constructs that individuals learn, are taught, and share within the context of the group to which they belong [10]. To some, “culture” refers to the way of thinking and behaving of a particular population or society [11]. Most authors, however, concur that culture refers to a set of values that are common to a group of people, and that these values are continuously taught, both consciously and unconsciously, by members of the group to new members, thus passing the culture from one generation to the next.

How individuals interact and communicate largely depends on their culture. In the seminal work by Edward T. Hall, “Beyond Culture” [12], the author states that one of the functions of culture is to provide a selective screen between man and the external world, and thus culture designates what we pay attention to and what we ignore. Hall further postulates that the degree to which one is aware of the selective screen is closely related to what he terms the “high-low context continuum” (Fig. 1). For Hall, low-context communication focuses on the primary issue(s) or topic(s) of the discussion; all other, nonpertinent items are deliberately filtered out of the conversation. People go directly to the point. Time saving and efficiency are driving factors of the communication style among low-context individuals. High-context communication or messages, on the contrary, are rich in details, and many factors, both physical and personal, are brought into “context” as part of the topic under consideration. Much attention is paid to the surrounding circumstances where an event occurs, so that factors such as social status, relationship, history, and social setting are all brought into focus to interpret the event. Even factors such as tone of voice, gesture, personal attire, and posture play an important factor in the overall interpretation of the situation.

According to Hall, Germans, Swiss, and Scandinavians are located toward the low-context end of the spectrum. North Americans are near this end as well, while Chinese, Koreans, Japanese, and Latin Americans are in the opposite, high-context end of the spectrum. The concept of high-context, low-context communication must be viewed as a dynamic process, influenced by such factors as personal experience, time spent with and among other cultures, geographic proximity to other cultures, languages, education, religion, professional status, and visible



identity. In general, it can be said that people are members of a variety of “microcultural” groups, or subcultures that may be on a different point in the scale of high-context/low-context continuum. In the opinion of Hofstede [13], high-context communication is more often found in traditional cultures, while low-context communication styles would be more common in modern cultures. Taking these factors into consideration, it is possible to understand that Native Americans, indigenous people from Latin America, and certain Asian cultures exhibit more high-context behaviors than most Europeans, whose style is more typical of low-context groups.

It is important to note that use of new technologies that limit the contact between humans may force people to low-context communication styles. Although it may be considered an effective way to route calls and disseminate information, calling a hospital and having to interact with a voice-menu might prove to be not only challenging and frustrating, but insulting to many members of high-context cultural groups.

If we take the previous model described by Hall, we can begin to understand the complexity and number of challenging problems faced today by physicians in critical care, the majority of who are “low-context” individuals, facing and increasing population of “high-context” patients. As we add a complex variable such as culture to an already challenging job, the results can be much added tension and stress to professionals in critical care services.

Another important concept, developed by Geert Hofstede [13,14], is that of “global dimension of national cultures.” According to the author, a “dimension is an aspect of a culture that can be measured relative to another culture.” For Hofstede, culture is learned, not inherited, and it implies a “collective programming of the mind which distinguishes the members of one group or category of people from another.” One of the dimensions studied by Hofstede is the degree of “individualism” in a society. Individualism, he states, “pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family.” “Collectivism” is considered to be at the opposite side of the spectrum; therefore, it “pertains to societies in which people, from birth onwards are integrated into strong, cohesive in-groups, which throughout people’s lifetime continue to protect them in exchange for unquestioning loyalty.”

As a result of his studies, Hofstede has developed the “individualism index value” (IDV) for 50 countries and three regions. The higher the score, the more “individualistic” the society; the lower the score, the less individualistic, and the more “collectivist” the society of the countries in the study. Countries such as the USA, Australia, Great Britain, Canada, and The Netherlands have the highest IDVs, while Colombia, Venezuela, Panama, Ecuador, and Guatemala have the lowest IDVs among the 50 countries ranked by Hofstede. Taking these factors into consideration, it is possible to realize the many challenges that physicians and other health care providers face in today’s increasingly diverse critical care environments where diametrically opposed cultures (e.g., individualist versus collectivist, or high-context versus low-context) come together.

Box 1. Examples of comparative behaviors expected from high-context or low IDV versus low-context or high IDV persons

High-context or low IDV

Decisions made by group

The decision to stop or continue life support would be made by relatives and immediate family members of the patient.

Patients rarely make critical end-of-life decisions by themselves. Family members often make the decisions even though these may be in contradiction of the patient's expressed desire.

Social structure based on hierarchy

The decision to proceed with organ donation may not rest on the children (or eldest child) of the patient, but rather in the eldest sibling, or the eldest representative of the community or social group.

Communication is indirect

A patient with a terminal illness may not be told about their condition or prognosis. News is communicated to the family, who often shield the patient from the truth. Speaking about death/dying is considered impolite, insensitive, and "bad luck."

Cooperation

The family of a patient in the ICU may insist on frequent and long visits. During their permanence with the patient they may want to feed the patient, move

Low-context or high IDV

Decisions made by individual

Patient may decide, a priori, on DNR option. These decisions represent the will and desire of the patient and are rarely interfered with by family members.

Social Structure based on equality

Patients decide by themselves the final destiny of their organs after the declaration of death. Members of the family would rarely interfere with the patient's final wishes.

Communication is direct

As part of the informed consent rights, an attending physician will discuss with the patient matters regarding a terminal disease, treatment options, DNR possibilities, and even financial plans to pay the bills after the patient has died.

Independency

The family of a critically ill patient in the ICU may feel comfortable with short visits or even no visits, with most interactions occurring through the physi-

the patient, or otherwise manipulate the patient in a manner that could be perceived to be detrimental to his/her health. cians and health care providers of the ICU.

Areas where difference of opinions are likely to arise include: patient autonomy, informed consent, and end-of-life decision; organ donation; assisted suicide; euthanasia; patient's diet, clothing, and accompanying icons such as medals, pins, and stamps; traditional ceremonies and the use of oils, ointments, incense, herbal patches, and other rituals such as prayers and chants. (See Box 1, which summarizes differences in behavior between high and low IDVs, and between high-context and low-context patients and families.)

The concepts of high-context/low-context and IDVs are useful in understanding patient behavior, and helping physicians and health care providers to create a useful framework for developing doctor–patient relationships that minimize the misunderstandings germane of transcultural communications. It is important not to assign other attributes, such as good or bad, better or worse, to these concepts, for this is neither the intent nor the purpose of the nomenclature. It is also important to note that behavior largely depends on what Hofstede refers to as to what is contained in the “software of the mind” [14]. This might explain why some identical twins might exhibit radically different behaviors or responses to the same social stimuli.

For critical care physicians and practitioners, one of the key to success is “avoiding cultural blind spots.” A valuable advice is presented by Buchwald et al [15], who suggest that “Whether cultural differences will play a role in providing care to a patient from another culture is not always obvious.” Of course, incongruity between your outlook and your patient's is more likely to be noted when the cultural gap is wide. But try to avoid superficial generalizations and cultural stereotyping. This is especially important because of the wide variation within ethnic groups. At the other extreme is the cultural blind spot syndrome. Just because a patient looks and behaves much the way you do, you assume there are no cultural differences or potential barriers to appropriate care.

A key concept for avoiding these pitfalls is understanding the distinction between ideologic and behavioral ethnicity. Many Americans of European origin nominally identify with their ethnic heritages. These ideologic ties, however, generally do not condition their health behaviors and beliefs. The opposite is true of behaviorally ethnic individuals. Their cultural background often profoundly affects their daily actions, and their attitudes and outlook on health and illness are likely to clash with those of the biomedical perspective.

Attention during the clinical interview to some predictors of behavioral ethnicity can help judge the likelihood that cultural factors will be an important element in the care you provide. Low socioeconomic status appears to be an

especially powerful predictor of behavioral ethnicity, regardless of whether a patient is native-born or newly arrived. The preceding authors also have adapted the work of Johnson, Hardt, and Kleiman [16] by summarizing the “predictors of behavioral ethnicity” as follows:

- Emigration from a rural area
- Frequent returns to the country of origin
- Inexperience with Western biomedicine and the health care system
- Lack of or limited formal education
- Little knowledge of English
- Low socioeconomic status
- Major differences in dress and diet
- Recent immigration to the United States at an older age
- Segregation in an ethnic subculture

As many have already experienced, one of the many challenges that critical care physicians face today is how to provide the patient with a service that is both professional and at the same time allows for a culturally friendly environment. Also, how to do it in a manner that is neither intrusive nor discomforting to other patients and personnel. Much of the challenges stem from the fact that although most of the physicians trained in the USA are likely to use low-context communication styles, the majority of the fastest growing ethnic groups in the country come from high-context cultures.

Patient autonomy, informed consent, and end-of-life decisions: a cultural perspective

Since the times of Hippocrates doctors have worried about the risks of sharing knowledge with their patients. An interesting essay written by Reiser [17] summarizes how physicians have dealt with disclosure conditions and prognosis. The author points out to practices in ancient Greece that indicated that “Bad news, like rude behavior or uncomeliness, upsets the patient and is not appropriate as part of an acceptable bed manner,” opinions by American physicians in the later part of the nineteenth century such as Austin Flint, a New York practitioner, and Oliver Wendell Holmes, professor of anatomy at Harvard, who believed that “Your patient has no more right to all the truth you know . . . He should get only as much as is good for him” (as quoted by Reiser [17]). In the twentieth century, the USA and other industrialized countries characterized by high IDVs, have moved away from “benevolent deception” toward open disclosure and informed consent. The driving forces behind the changes have been several, including the 1973 “Patient’s Bill of Rights” issued by the American Hospital Association, changes in social attitudes, the availability and quantity of information through sources such as the Internet, and health care practices that center on patient participation in

Informed consent refers to a person's right to choose and decide the course of treatment that they wish to receive given their medical condition. In the USA and many European countries including Sweden, Denmark, and The Netherlands, "patient autonomy" refers to the right of an individual to make informed consent decisions about their medical care, life support, end-of-life, and organ donation. In some instances, recent legislation in The Netherlands and states such as Oregon (USA), patients may even decide when to end life through assisted suicide or consented euthanasia. For Cross and Churchill [18], "A consent is morally valid if it is granted by a patient who is knowledgeable concerning the proposed intervention, free from constraints or coercion in deciding and mentally competent . . . They [patients] are free to choose alternatives that physicians may think ill-advised so long as the rights of others are not abridged." Informed consent assumes a patient's (individual) right for self-determination. As discussed earlier, in cultures that have a high IDV index and cultures that exhibit low-context communication, informed consent is likely to be part of a patient's right. In contrast, in cultures that have low IDV index or use high-context styles of interaction, these decisions are often made by elders, family, or an extended community group. In addition, in the later cultures, respect for hierarchy and structure are strictly observed. Trust is at the core communications, and therefore, it is for the "Doctor" (the learned person, higher in the echelon of intellectual hierarchy) to decide. Besides, how could a patient that has little knowledge of medicine be expected to decide about something of which they have no practical knowledge?

Among the challenges that critical care providers face today, few are as sensitive as that of patient autonomy and informed consent. Frequently, the issues revolve around a clash between culture and the local legal requirements. As it has been alluded to before, in cultures with low IDV scores, family, and not the individual, is expected to be making decisions related to critical care, DNR, organ donation, and other important end-of-life matters; patient autonomy is limited; open, direct discussion might be countercultural in high-context form of communication. Galanti [8] notes that she learned about a hospital where "the conflict between the patient's right to know and cultural traditions which forbid it is dealt with when the patient first enters the hospital, before being examined by a doctor. The patient is asked if there is a family member who should be given the pertinent information. If there is, the patient then signs a waiver to that effect." This seems to be a practical form of bridging the potential gap(s) created by intercultural communications; however, it still does not address the many cases encountered in critical care where the patient is unconscious, nonverbal, or there is difficulty with language communication. It also assumes that such waiver forms are available in multiple languages, and that patients feel comfortable when stamping their signature in the paper. This can be of particular relevance to those individuals in whose cultures "the spoken word" is valued beyond any form of written representation or commitment.

Communicating patient's health condition or prognosis can be particularly difficult when news about the prognosis of the patient is not encouraging or

involves some hint of end of life. In some cultures, such as the Chinese, it is considered bad luck to talk about death. For many Hispanics, telling a person he or she is “terminally ill” may be considered inappropriate, rude, impolite, and insensible. The patient is often shielded from any bad news, and whole families sometimes deal directly with health care providers. For some Catholic patients, news about imminent death may be interpreted as a sign that the physician is assuming the role of God, that no miracle is possible, and therefore denying the power of divine intervention.

Some studies have addressed how some cultures deal with news about prognosis, informed consent, and patient autonomy. Blackhall et al [19] reported on a study of 800 patients of four different ethnic groups in the United States: African-American, European American, Korean American, and Mexican American. Their study focused on how cultural attributes such as ethnicity, religion, age, and income influenced attitudes toward patient autonomy and decision making. They found that Korean Americans were less likely than African-Americans and European Americans to believe that patients with terminal illnesses should be told the truth about their diagnosis and be informed about their prognosis or that the patient should make the decision about the use of life supporting technology. Instead, most Korean Americans believed that the family should make decisions about the use of life support. Mexican Americans’ attitudes tended to fall closer to those exhibited by Korean Americans. Such behaviors are consistent with Hall’s postulates. As the authors note, “For those who hold the family-centered model,” that is high context, “a higher value may be placed in the harmonious functioning of the family than on the autonomy of its individual members.”

The preceding study also seems to indicate that patients with a higher degree of education may be more likely to favor telling the truth about diagnosis and poor prognosis. According to the authors, acculturation and wealth related to education might be responsible for the apparent shift in attitude. Becker et al [20] studied how members of three ethnic minorities (African-Americans, Hispanics, and Filipinos) viewed and managed their chronic illnesses. They concluded that of the three groups, African-Americans “most closely epitomize the core US values of autonomy and responsibility for oneself, while among older Hispanics, family interdependence is highly valued and expectations dictate that the family is responsible for managing the elders’ affairs including illness.” The study also showed that among young Hispanics their attitudes and behavior varied greatly within the group. In the third group, Filipino Americans, family interdependence was highly valued, but a strong sense of responsibility for their own health resulted in the families focusing on promoting healthy behavior group.

Few instances can be more painful and frustrating to a physician than being accused by patients or their families of neglect, insensitivity, or lack of interest for the person under their care. Critical care practitioners often face circumstances where they must decide whether to continue or withdraw life support. In most instances such decisions are made in consultation with the patient’s family, and

Muller and Desmond [21] point out that “Physicians are not legally or morally obligated to provide therapy that offers no hope of medical benefit, and in the best estimation of the health care professionals, is futile.” These views can contrast the values and cultural practices of individuals that believe that a patient should be kept alive, by any means, until expiration. In such cases, the conflict can lead to situations that can be devastating for all parties involved. For example, a Chinese woman terminally ill with metastatic lung cancer had been admitted to the hospital. Her youngest son, age 22, who could speak English, assumed the role of spokesperson of the family, and assumed responsibility for making decisions. The case turned out to be very difficult for the health care providers. On the one hand, the son acted as the sole interpreter and refused to translate or discuss the mother’s condition, her diagnosis, her prognosis, or any issues that would relate to DNR orders. Even when the patient became nonresponsive with labored breathing, the family insisted on extensive and aggressive therapy. When the attending physician refused and further denied the son’s request to intubate the mother in an attempt to prolong her life, the physician was accused of racial bias and “inadequately taking care of his mother because she was Chinese.” When the woman died shortly after admittance into the ICU, the young son screamed to the attending physician: “Are you happy? You got what you wanted. You murderer!” [21]. This attitude is consistent with the Asian Pacific cultures where “Children, particularly the oldest son, must preserve their parents’ lives at all costs. A child’s directive to discontinue life support, *even if this is the parent’s wish*, may be considerable dishonorable by other relatives and the community” [3].

In another instance, Kessig [22] reports on an Iranian patient who had been admitted into the ICU on full ventilatory support. The family was advised that she was brain dead, but they objected to removing the ventilator, and further insisted on “many unnecessary medical procedures.” On the second day of admission, life support was withdrawn, and when the family found out, they told the resident that she had “murdered” the patient. For most Iranians, as it would be for many other Muslims, prolongation of life by artificial means is not only desirable, but also a sign of love and respect toward the dying patient, a sign that the family members “were there until the very end,” until all means of maintaining “life” had been exhausted.

Within the same culture, even within the same family, there can be dissent due to differences in acculturation and age/generation gaps. Such was the case with a Hispanic male, 80 years of age, suffering from senile dementia. During the last few weeks, patient was force-fed orally via a syringe inserted in the mouth that caused frequent bouts of choking and asphyxiation. His discomfort and suffering were evident to the family. After consultation with the attending physician, his children, all college graduates, ages 35 to 50, agreed on suspending the feeding, knowing that it would accelerate the inevitable outcome of death. The siblings of the patient, all devout Catholics, ages 71 to 86, were shocked to hear about the children’s decision and immediately called for a family council. During the meeting, they lashed out at the children, indicating that their “senseless” position

amounted to “premeditated murder,” and that the life of the patient was in God’s hands. That it would be His decision when, where, and how death would occur. The elders also insisted that their brother’s suffering was God’s way of purifying his soul and to prepare him to enter the gates of Heaven for eternal life, as long-term suffering presents an opportunity to show courage and faith in God. The elders prevailed, and the man was force-fed, until not a drop could pass beyond his lips. The attending physician and other health care providers in this case found themselves in the middle of a family split in their views with respect to a patient’s right to a dignified death, and the belief that it was God’s prerogative to determine a patient’s fate. Although the individuals involved were all members of the same family, all Catholics, all Hispanics, and otherwise similar in culture, the differences in values, opinions, and views can be attributed to generational differences marked by age, education, and acculturation. This case also stresses points that in cultures using high-context communication, and low IDVs (note: the family involved is from Venezuela, IDV = 12), the concept of hierarchy plays an important role in the process of decision making. The brothers and sisters of the patient were able to prevail over the children based on the hierarchy of their age.

The previous cases depict some of the many challenges that physicians face today in our increasingly multicultural society, especially when patient and care provider have differing cultural beliefs and practices or are in opposite sides of the communication spectrum defined by Hall.

Race and pharmacokinetics

Some drugs have been observed to have different effects in the different racial groups. Studies by Saad et al [23] noted racial differences in the relation between blood pressure and insulin resistance between Caucasians, Blacks, and Pima Indians. They concluded that “The relations between insulimonia, insulin resistance, and blood pressure differ among racial groups and may be mediated by mechanisms active in whites but not in Pima Indians or blacks.” Carson et al [24] reported differences in the response to vasodilator therapy of Blacks and Caucasians with heart failure and, similar doses of β -blockers have been shown to have smaller barotropic effects in Black patients compared with Caucasians [25]. Analogous differences have been observed using angiotensin-converting enzymes [26,27]. In another study, Yancy [28] concluded that carvediol seemed to have the same degree of benefit to both Black and non-Black patients with heart failure. Johnson, Burlew, and Stiles [29] showed that during parasympathetic blockade Blacks were less sensitive to isoproterenol than Caucasians, which they attribute to greater β -adrenoceptor sensitivity in Caucasians than in Blacks. Bertilson [30] notes that interracial differences in polymorphic drug oxidation may be a reason why Asians respond to lower doses of antidepressants such as diazepam than do Caucasians.

There is much debate about the significance of the apparent differences

in clinical trials have been noted by authors such as King [31]. This, in itself, may contribute to biased interpretation of the results obtained using mostly a homogeneous sample (e.g., Caucasian patients). Although authors such as Cooper and Kaufman [32] point to the dangers of extrapolating the social notion of “race,” to any biologic or genetic implications, the fact remains that the for physicians practicing in critical care units, ERs, coronary units, and the likes, must be aware of these observed differences and the implications for the welfare of their patients.

A point of consideration for physicians, especially those in critical care units, is that a number of patients from the wide spectrum of cultures and ethnicities may have or may be using alternative medicines on a daily basis. In some cases these are prescribed or mixed by shamans, healers, “brujos,” “curanderos,” or many other characters of their native folklore. Some of the medicines that would normally be administered to the patients as sedative, pain controllers, barotropic, or chronotropic, may in fact have an unpredictable and undesirable effect on the patient. It is therefore recommended that when, in suspicions of the possibility that a patient may be using “alternative medicines,” the patient or their families be asked to disclose such practices. It is also recommended that such questions be addressed in a friendly and unthreatening manner, as to increase the probability of obtaining an accurate answer.

Death and dying: autopsies and organ donation

When does death occur? What happens to the body and soul after death? Both these questions take center stage when discussing with patients or families issues pertaining to DNR, continuation of treatment, organ donation, and autopsies. Before there were instruments to monitor heart or brain activities, the cessation of breathing was used to determine the point at which a person was pronounced dead. Feathers and mirrors under the nostrils were used to monitor the air flowing out of the nostrils. Today, in most Western countries of Europe and the Americas, it is socially acceptable that death can be declared when no further brain activity is present. According to Iverson [33], “Most Christian scholars strongly support the concept of death by brain criteria, based on the doctrine that the soul departs the body at the moment of death. Most Jews likewise accept the concept of death by brain criteria, as do so many non-Christian religious groups. Religions such as Taoism, Confucianism, Zen-Buddhism, and Shintoism that stress the integration of mind and body have difficulty accepting death by brain criteria.” Lock [34] stresses that “In Japan, by contrast [with the United States], death is interpreted primarily as a social and not as an individual event, and efforts to scientifically define the end of life as a measurable point in time are rejected outright by the majority, including many clinicians.”

Culture is clearly a determinant factor in the acceptance of the concept of “life end.” Religion, patient religiosity, and acculturation also play an important role at the moment of defining death. The fact that many patients come from areas,

including within the USA, where medical services are precarious and life support systems are the exception, also influences how these patients and their families deal with such foreign concepts as “brain death.” Yet others look for answers in their religious milieu. In a paper published in the *Journal of the Islamic Medical Association*, the author, Kahn [35], asked the question: Can brain death be used as a criterion of death in Islam? He concluded that in those occasions when a distinction between the dead and the living are not clear, “equating the presence of brain death with real death is permissible under Islamic guidelines.” The author also indicated that “In my review of the Islamic jurisprudence, I was unable to find any statement which specified the time of death . . . Therefore, I believe that accepting brain death as a criterion of death, does not violate any Islamic principle. This should come as a comfort to those of us who deal with critically ill patients and have to grapple with the issues of life and death on an ongoing basis.”

Because the death of the patient may occur in the ICU, the initial preparation of the cadaver and the beginning of the family mourning process may take place in the room or area where the final expiration occurred. To facilitate the grieving process and the preparation for the funeral, it may be necessary or at least desirable, that some degree of privacy and space be given to the family for prayers and rituals that may include healers, shamans, a tribal elder (to assist the dead in the transition to eternity), a priest, a rabbi, or an iman. As an example, Hai and Husain [36] describe some of the rituals common for Muslims.

At the time of death, if the patient is conscious, then it is customary for bystanders to recite and encourage him or her to recite the Shahadah. Also, it is customary to recite a certain chapter of the *Qur'aan*, Surah Ya-sin, at the time of death.

After death, the eyes and mouth are gently closed. The body is washed in its entirety and shrouded in simple white cloth. One piece is wrapped around the lower half of the body. The deceased's left hand is placed on his or her chest first, and the right hand is placed over it. Then the second piece of cloth is wrapped around the body except for the head. A third piece of cloth that is longer than the others is wrapped around the whole body from above the head to below the feet. Four rolled strips of the same cloth are tied, one above the head, one below the feet, and two in between. In the case of female bodies, two extra pieces of cloth are used: one around the waist (like underwear) and one around the chest. The latter piece may be a large one, which has a hole in it for the head and falls to the feet both in front and back like a sleeveless shirt. Perfume or perfumed water is applied to the face, neck, hands, knees, and feet. It is not customary to use a coffin, although it often is done in the African American community; this group might uncover the face of the deceased for viewing. Holding a wake, making up the face, or dressing the deceased in street clothes is not done.

At the service, members of the community stand in line facing Makkah. The shrouded body is placed with its head to the right side. An *Iman* (Muslim religious leader) leads the prayer. If women are present, then they stand in a line

and for the community. Burial is done promptly, usually within 24 hours of death (cremation is unacceptable). Most Muslim communities in North America either have their own burial grounds or have an arrangement to use a portion of a Christian or Jewish cemetery. The Muslim grave is a simple, deep, long trench in the ground, dug perpendicular to the direction of Makkah. Either the body is placed on its right side to face Makkah or, if the deceased is lying flat, the face is turned toward Makkah. A variety of prayers and readings from the *Qur'aan* are performed during and after the burial. It is not customary to place flowers or candles on the grave. A child or a miscarried fetus of 4 months of age or over is washed, prayed over, and buried in a similar manner. A miscarried fetus of less than 4 months of age is not considered to be a person yet. Therefore, it is just wrapped and buried or otherwise disposed of; washing and ritual prayer are not required for it (Siala, 1996).

Within the next few days after burial, people gather at the house of the deceased or in the mosque to recite the Holy Book and make prayers for the deceased (*Fatiha*). In some families, this event will be repeated on one or more occasions until the 40th day after burial and then yearly. Death is, of course, a sad occasion due to the loss of a loved one, especially if it is a premature or unexpected loss. Therefore, it is natural for people to be weeping and for others to be extending their condolences. However, it is considered undesirable to moan and cry aloud, and there is no public show of sadness by wearing black clothes, arm bands, and the like. Acceptance of God's will in taking the deceased and an expression of satisfaction that the deceased has reached his or her reward are customary.

Cecelia Goodnight (unpublished data, 1982) noted that the practices in Asian countries with respect to death, dying, funeral, and autopsies can vary significantly between the different nationalities. For example, death is a grievous time in Vietnam, while in Laos every attempt is made to make it a joyful celebration. Vietnamese are generally opposed to cremation and autopsies. The latter stems from the fear that some part of the body will be missing on reincarnation. Laotians prefer to cremate their dead, if they can afford it. Autopsies are frowned upon, as they wish little disturbance to the body. Cambodians seem to be more acquainted with autopsy procedures than other cultural groups from South East Asia. When a Cambodian patient dies in the ICU, the family may want to have a Buddhist monk on location to offer prayers. Chinese and Japanese are known for their dislike for autopsies (Your parents gave you the body. Who are you to give parts away!), and do not want any part of their body to be donated. The body, especially the viscera, should be intact. For Mien, the preparation of the body may include giving it a bath and cutting off all hair, dressing it in all new clothes, including new shoes, and a piece of silver is placed in the mouth. Hmong in general tend to be Animists, and their beliefs differ slightly from clan to clan. Many believe in reincarnation and therefore insist that the body must be intact to make the journey to the spiritual world. Of particular importance are the tongue (so that he will be able to speak) and the eyes (so that he will be able to see.)

However many differences there may be, the key is for the ICU worker to recognize that when a patient is in the process of passing on, the pain and grief of

their loved ones is intense. Whenever possible, health care providers should try to accommodate the needs of the family to make the moment the least traumatic to all involved. For instance, if the family asks for the presence of a priest, monk or rabbi, these might be easy to summon or to accommodate. In the case of a Native American Indian, a tribal representative might wish to prepare a ritual including chant, dance, or smoke, and it might be possible to satisfy most of these wishes. In other instances such as those that may involve animal sacrifice, the family might have to wait until they are at a more appropriate place.

One request that may come from some orthodox groups including some Muslims, Jews, Hindus, and Christians, is that only persons of the same sex be present with the patient at the time of death, and that no one from outside their religion see or touch the patient or, later, the corpse. Most of these should be easy to comply with, and it is recommended that critical care professionals do their best to accommodate the needs of the grieving families. Ross [37] suggests that knowing about the cultural practices of patients helps in providing sensitive nursing care to the family after the patient has passed on. Ross also notes some of the Jewish traditions: "As a person breathes his last breath, many Jews will open a window as if to let the person's spirit to escape from the room. This may not always be possible in a hospital. The door may be opened to symbolically achieve the same effect. Close family members may tear their clothes at the moment of death as part of mourning tradition. Another important Jewish mourning tradition prohibits the deceased from being left alone from the time of death until burial. Many families would find comfort in being able to stay by the side of their loved one during that period."

Autopsies and organ donation are processes that may have their administrative processes begun at the time the patient is pronounced dead in the ICU. Critical care providers may be the source of interaction with the patient's family in the discussion of these matters. Culture plays a most important role on how the families will react to these discussions. For instance, for many of the Asian cultures it is important that the body be buried intact, and therefore autopsies and organ donation are not commonly accepted by members of these cultures. As Nakasone [38] points out, Buddhists have traditionally associated life with sentience, which may help explain their reluctance to practice autopsies and organ transplantation, as "Some believe that cutting the corpse or taking away organs pains the individual even after death." Feldman [39] notes that "Japanese surgeons have performed only one heart transplant in the quarter century since the procedure was developed. Possessing the requisite training and technology . . . the lack of a brain death standard limits the availability of transplantable organs." Feldman also alludes to the fact that the surgeon who performed that transplant, Dr. Wada Juro, was later accused (the prosecutor's office dismissed the case) of "murdering the organ donor."

In many cultures, autopsies have not been part of the social or medical tradition. For instance, most Jewish families will dismiss suggestions of an autopsy unless they are legally necessary, or unless the procedure is done to

Muslims, the beliefs are similar, as pointed out by Hai and Husain [36]. “In classical Islamic *Sharia* law, autopsy was forbidden because no benefit was felt to accrue from this practice. Present understanding (*Fiqh*) of the value of autopsies as a means of understanding the mechanisms of illness and also of investigating crimes must be balanced against unnecessary dissection of the dead. Voluntary permission for autopsy either during life or after death by relatives generally is scoffed at because it delays the usually prescribed methods of disposition of the body. However, because there is no clear-cut injunction against autopsy in the *Qur'aan* or *Hadith* (a collection of sayings and actions of the prophet), there is room for discussion.”

Situations that involve the interaction of individuals from different cultures increase in the complexity and require a great deal of flexibility and accommodation to avoid misunderstandings and facilitate the communication between the parties. Given the circumstances germane on ICUs, the burden of patience and understanding may fall in the shoulders of the physicians in charged. As Hai and Husain [36] suggest, “in Eastern cultures, it is typical to show deference to an authority figure by saying ‘yes’ without necessarily agreeing with what is being said. It is worthwhile to take the extra time to explain tests, procedures, and treatment and to make sure that one’s explanations really are understood.” They also point out to an important fact, that, although in reference to Muslims, it also applies to many cultures: “If a Muslim client appears to be insisting on doing something (or refusing to do something), then he or she often will have a religious reason for doing (or not doing) it. It is worthwhile to simply ask “Why”? (or “Why not”?) and to try to understand the reason. Religious matters are not necessarily based on simple logical reasoning. If something is forbidden in the perception of the client, then it is forbidden. It does not work to argue over it. One may, however, explain the pros and cons of that action and ask whether, in these unusual circumstances of serious illness, it might be allowed so as to save a client’s health or life.”

Summary

The population dynamic and the immigration trends in the USA continue to challenge health care professionals who each day must serve an increasingly diverse population. Today’s physicians must not only have a solid background in medical sciences, but they must also have knowledge of how culture, race, and ethnicity impact how patients view and accept traditional Western practices. Whether doctors and patients are close in the “context spectrum” will often determine their ability to communicate beyond the spoken language. According to a report of the American Medical Association [40], by the year 2000, out of a total 812,770 physicians, only 2.5% were Black, 3.5% Hispanic, and 8.9% Asian. Only a fraction of a percent was American Native/Alaskan Native. Therefore, the majority of the physicians are Caucasian, and it could be assumed that they would likely be accustomed to high-context communication styles. As indicated earlier,

the gross of the demographic changes and population increases in the USA during the past 10 years can be attributed to immigration from regions of the world where low-context communication styles are prevalent. Such differences between physicians and patients can create difficult, tense situations in an already charged atmosphere as can be that of a critical care unit.

As Buchwald et al [15] have pointed out, “Some patient’s beliefs about the causes and cures of illness are at odds with your Western biomedical training. To treat them successfully, you need to understand their health perceptions, behaviors and expectations.” Physicians are encouraged to be culturally sensitive, especially in those delicate cases involving medical futility and DNR orders; patient autonomy; pain sensitivity and pain expression; pharmacokinetics and the different effects that some medications may have on individuals as a function of their race; the use of some patients of parallel, alternative medicine methods that can impact the treatment protocol established for a patient; autopsies, organ donation, and the implications on patient behavior; and the expectations of a patient and their family on the role of the physician in the patient–doctor relationship.

Some cultures may require more time than others to digest the concept and agree with procedures that are foreign to their mental software. Patience, long conversations, and involvement of third parties may assist in reaching an agreeable understanding with the patient and or their families. In some cases, the cultural gap may be impossible to bridge, and prudence and sensitivity will play an important role in how the case evolves. It is important to remember that sometimes even the best intentions can result in undesirable outcomes. Take the case presented by Meleis and Jonsen [41], of an Egyptian patient admitted into a hospital, who, on the second day, went in deep coma. The physicians believed that the patient was beyond any expectations of “conscious and sapient life,” and decided to call a Moslem sheikh as a religious advisor and to help the family of the patient with news of the inevitable outcome. Instead, “the very sight of the sheikh in the hospital room of the comatose patient heightened the family’s and friend’s mistrust of the professionals caring for the patient. To them, the well-meaning intention of the medical personnel was symbolically analogous to bringing a Catholic priest to perform last rites and comfort the family.” What had happen? Why the Muslim sheikh did “failed” his mission to comfort the family? According to the authors, “the Moslem sheikh was non-Arab.” It is quite possible that there were conflicting cultural values that prompted the negative response from the Muslim family. Although this particular case brings into light how difficult and complex intercultural communications can be, it is most important to keep in mind that such blunders should not deter health care providers in their continuing efforts to provide “culturally friendly” services to their patients.

In the past, authors such as Hackler and Hiller [42] have expressed strong opinions and argue that “[hospital] Policies should be changed to allow physicians to write a do-not-resuscitate orders over family objections . . .,” arguing that “. . . the legal duty of the physician and the hospital is to the patient

the letter of the law, they are likely to be understood and respected by the majority, mainstream, Caucasian population of the USA. However, as Becker et al [20] note, “Ethnic minorities do not necessarily subscribe to the values or tenets associated with US medical system, such as dichotomization of mind and body, the belief that individuals control their mind, and the value of taking responsibilities for one’s health.” The ways in which these value conflicts are resolved, note in his essay Kundstadter [43], “will also provide evidence for the description of social order and social change, for example, the dominance of technological qualifications over kingship in determining who shall decide a course of action, or the relative tolerance or intolerance for pluralism.”

Cultural competency and cultural sensitivity are essential attributes for physicians practicing in current times. Avoiding “cultural blind spots” as well as generalizations will most likely result in most improved doctor–patients relationships, minimizing conflict and embarrassing situations. Even professional with a high degree of cultural competency and knowledge of other races and ethnic groups can fall pray to the minute subtleties germane to communication styles even among “homogeneous” ethnic groups. However, knowledge, experience, sensitivity, awareness of cultural differences, using “cultural mediators,” and common sense should serve physicians and critical care providers in their goals to better serve their patients and their families.

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