

## A Time for a Paradigm Shift? The Necessity for the Human Side of Patient Care

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### Author Note

The opinions of this review are those of the author alone and do not represent the views of the Helen and Arthur E. Johnson Beth El College of Nursing and Health Sciences at the University of Colorado, Colorado Springs, or other institutions or organizations the author may serve. The author has no financial conflicts of interest.

### Abstract

This article discusses the need to bring caring and compassion back as the core of caring for human beings. It addresses a number of perspectives, including the explosion of knowledge in the last 50 years, the potentials and pitfalls of technology, and the role of healthcare reform in degrading a caring atmosphere. It attempts to define the human side of caring, provides a very abbreviated history of healthcare, the physiological benefit and cost of caring, and some of the ethical issues involved. It concludes with a reflection of the article's content and a call for healthcare providers to begin to examine their own caring practice and to create an atmosphere for others to do so.

*Keywords:* Care, compassion, healthcare, empathy, sympathy, technology

### Introduction

It would be very easy to sum up this entire article in one sentence, and that would be a statement made by Geraldo Rivera when speaking about his watershed moment while covering an exposé of the Willowbrook State School (Film Rise, n.d.). He stated "...The assembly line works for cars. It does not work for people. People need humanity. They need the spirit of compassion. They need to be loved...." Though he was speaking of the horrific conditions he saw at Willowbrook in 1972, his comment seems to be even more relevant in today's healthcare environment. However, to fail to delve deeper into this important topic would be dismissive of this topic as unworthy of further examination. Therefore, this article will look at this problem from a number of perspectives including: the explosion of knowledge in the last 50 years; the role technology is playing, and the contribution of healthcare reform. It will attempt to define the human side of caring, provide a very abbreviated history of healthcare, the physiological benefit and cost of caring, and ethical issues involved. It seems a very large undertaking and perhaps it is. Yet the bottom line is and always has been that there is the ultimate human experience of suffering and illness that we must recognize from the humanistic point of view.

### The Human Side of Caring

Because of the profound advances in the science of healthcare, the organizational and system changes, and advances in technology, the human side of caring and healthcare seems to have taken a back seat. The following is an exemplar of the current lack of consideration of the personhood of the patient as related to this author very recently:

John had suffered some sort of spider bite that was beginning to look more and more like a brown recluse bite. Often with these bites, there is significant tissue loss, requiring intensive and early medical intervention. After a few days, the bite began to look angry, red, and was quite swollen with some tissue necrosis. The usual home remedies were not working. A call to John's family practice provider's office for a same day appointment was unsuccessful. The untrained medical assistant who was in charge of triage gave John the next appointment, which was 3 days away. It was suggested that John visit an urgent care clinic in the meantime. Therefore, John went off to a local urgent care. After waiting some 30 minutes (considered a short wait), he was taken to a room where vital signs were taken, then left alone. The person doing this never introduced herself, just performed her tasks with no interaction. Sometime later, another person came in, told John it was red and infected, and then gave him a prescription. As well, this person never introduced himself. John had a few questions about the bite, but was not given an opportunity to ask them; instead, he was ushered back out to the waiting room so the next person could come in. John then went to his appointment 3 days later and was told it was indeed a spider bite, it was infected and he needed stronger antibiotics. At this point there was significant skin breakdown and it was still red. He was given a referral to a dermatologist and told to wait for a phone call. The next day, the dermatologist's office called and explained to John the next available appointment was in 6 weeks. When he tried to tell the office scheduler (not a medical person) that this was an acute problem and he was concerned about it, the scheduler simply responded with "Well, this Dr. is very busy and I cannot get you in to see him." John felt belittled by someone who seemed to have no empathy for his situation. So, John was left to continue the antibiotics and hope the bite healed on its own. All indications were that it would. John related to me, "I believe I would have been better treated by robots."

Fortunately, this story had a good ending. Unfortunately, this is an all too frequent experience in healthcare today. Patients are shuttled through a system that seems to have little regard for the human condition when a person, a human being, is ill or injured. Instead, they are a "number," even called so. The provider often spends more time staring at a computer screen than genuinely communicating with the patient. A barrage of standardized questions are asked, all in the name of collecting metrics to provide data for regulators. The numbers in the computer are thought to tell the story, yet they do not. The response by big data managers is that a small number of anecdotes simply cannot be relied upon to drive healthcare when compared to the large amount of quantitative data collected.

The following serves as a stunning example of what can happen when individuals at all levels of a hospital organization fail to attend to patient care issues in the midst of a massive reorganization of the healthcare system. This event occurred between 2005 and 2009 at two

Mid Staffordshire hospitals in Great Britain. An inquiry into patient complaints and a higher than normal death rate showed, according to a report by Robert Francis, QC,

....failure on a scale that cannot be adequately expressed in statistics. The individual accounts of suffering are too numerous to list here, nor could they be done justice; but they spanned almost every aspect of care and painted an overall picture of a trust devoid of humanity, totally incapable of recognising patients as people. (Holmes, 2016; p. 521)

Francis concluded:

The shock that is the appropriate reaction to many of the experiences the Inquiry has been told about reflects the distance between the standard of basic care that is every patient's legitimate expectation and what has, on too many occasions, been delivered at Stafford Hospital. (Ibid)

The conclusion of the report was that this was an immense failure of all involved, from less than adequate care by caregivers to disregard by managers and overseers. The result was injury and death to patients. In the current unknown state of healthcare in the United States, we too, risk a similar event in our system. We are at a point where definitive action must be taken to preserve the dignity of healthcare.

Recently a very small boy with a very rare genetic disorder has been headline news. Charlie Gard's case had been considered futile and too expensive, so he was ordered off life support and experimental treatment denied, citing the statistics and unsubstantiated claims of harm as reasons for the denial. While court battles raged for several months, Charlie remained on life support and his disease went untreated. What is so interesting about this case is the fact that the doctors stated they believed he "might" be suffering, so to end life-support would be more humane, overruling even the parents' ability to pay for an "as yet unproven" treatment. At the same time, this little boy's parents were suffering from their own kind of battle, dealing with a devastating disease and the reduction of both them and their child to numbers and headlines. After Charlie's case was deemed to be catastrophic and irreversible, and the European Court of Human Rights rejected the parents' final appeal, the parents subsequently decided not to waste any more of the time they wanted and needed with their son in seeking further treatment for him. Even then, Charlie's parent and the hospital could not agree on how Charlie was now to die. He was put into hospice, immediately taken off life support, and subsequently died the next day. This was despite the fact that Charlie's parents had asked for a few more days to spend privately with their little boy who had valiantly fought for his life.

This case illustrates the collision of science and humanity. Charlie's parents believed their son deserved a chance; the providers thought his case was futile and that he was likely suffering, though there was no proof. They thought he should be allowed to "die with dignity." In the end, he was not even allowed to die with dignity in his parents' sense of the term. The science of Charlie's disease had advanced to the point where a treatment was available that might offer improvement. The courts sided with the providers. The case went international with President Trump and Pope Francis becoming involved, siding with the parents. The parents' opinion never really had a chance. The window of opportunity for Charlie's successful treatment closed with his and his parents' humanity pushed to the background. What kind of "care" was shown to Charlie?

### Caring, Compassion and Empathy

Hence, exactly what is meant by the term “caring” in the context of this article? Throughout the literature, the word “care” is used differently and in different contexts. Merriam Webster (healthcare, n.d.) defines the term health “care” as, “the maintaining and restoration of health by the treatment and prevention of disease especially by trained and licensed professionals (as in medicine, dentistry, clinical psychology, and public health)”. Nowhere in this definition can one find the words, human, care, or empathy. The same dictionary defines the term “care” in two contexts: one as a noun in the sense of things achieved to avoid harm to persons or things, the other as a verb in the sense of feeling concern or affection for another. The term “care” in the context of this article is used in the latter definition. That is, it includes the concept of empathy and compassion for another human being. The term health “care” could be called a misnomer when discussing the human side of disease treatment and prevention. One might suppose that care in the sense of the first definition of receiving a treatment or physiological care would constitute exemplary care. It would seem to be sufficient in today’s healthcare framework of product lines and emphasis on clinical competence. Still, this is not enough to alleviate the needs and suffering of the human condition. As so eloquently expressed by Mr. Rivera above, humans need compassion and to feel loved. Caring in this sense implies an act based on concern for and understanding of another’s burdens. In today’s framework, this human viewpoint is quite frequently missing and healthcare is undergoing a crisis where compassion is scarce.

Care by health professionals frequently is touted as both an art and a science. In the current knowledge explosion, the art of medicine has been largely lost to the science. Shelley (2015) provided an excellent editorial describing how medical professionals need to re-integrate spiritualism (not in the organized religion sense), dignity, and compassion. He describes an “empathy gap” in medical education, with new knowledge focused mainly on learning the treatment of underlying disease processes (pathogenesis), as opposed to the role of humanism and compassion on the healing process (salutogenesis). Clark (2016) also described the difficulty nurses and nursing students currently have with integrating transpersonal caring into their practice and offers advice to educators for helping students assimilate this aspect of patient processes.

Jean Watson, a nurse theorist, has been instrumental in beginning to bridge that gap with her Caring Theory. She began to define this in her early work in the late 1970’s and described this as central to a nursing caring relationship. She believed an integral part of nursing’s healing role was to help an individual to maintain humanity and individual wholeness. Her work had deep philosophical and international experiential roots and had at its core, a genuine caring relationship as integral to healing. Later, she further evolved her theory to develop the 10 Caritas Processes (Watson, 2008). These included such things as being completely present to the person being cared for and creating an environment that allows for healing on physical, spiritual and emotional levels. Her work was so groundbreaking in nursing that it has been adopted by numerous hospitals world-wide as the foundation for their patient care practices (Watson, 2009). Dr. Watson has led the field in defining a caring philosophy for practice for all healthcare professionals. Even with the advances in her work, genuine caring and compassion seems to continue to be lacking. Most of the literature on compassion is concerned with compassion fatigue and burnout experienced by caregivers.

Lown, McIntosh, Gaines, McGuinn, and Hatem (2016) discuss the need for compassionate care as vital to medicine and that this should be a part of the provider's education. They state:

...compassion without collaboration may result in uncoordinated care, while collaboration without compassion may result in technically correct but depersonalized care that fails to meet the unique emotional and psychosocial needs of all involved. (p. 310).

Shelley (2015), a neurologist, believes strongly there is a physiological mechanism for healing based on humanism and spiritual wellbeing. He iterates that compassion and humanistic care is vital and necessary for creating health and that such education also should be requisite for healthcare providers. Fiering (1976) discusses a term he calls, "irresistible compassion" in which a human being is compelled to move toward relieving suffering. Also termed sympathy and humanity, it described our need to assist others. By contrast however, during the eighteenth century, if we as humans are irresistibly compelled to relieve suffering, then anyone who showed apathy was considered as less than human (Fiering, 1976). Fernando, Arroll, and Considine (2016) differentiate compassion and empathy, stating one can feel empathy, for example with the patient who may have a broken leg, cannot walk and is in pain. However, they assert compassion is the next step on the continuum whereas one takes action toward alleviating the suffering of the patient. Empathy can occur without compassion, but compassion cannot occur without empathy.

Philosophically, compassion could be compared to caring. The two terms are often used interchangeably, yet they are different, or at least differently considered. To have compassion means to have deep empathy for an individual and to have a desire to alleviate their pain and suffering. Caring has many meanings, but can be used in the above sense with a person, but can also be used with an inanimate object as in to care for a book, or a watch. The term compassion is a much deeper representation of the concept as it is coupled with the desire to remove distress where as it is not necessarily so with the term "caring." (caring, n.d.). Thus, when we are discussing the need for a shift to humanity in health care, we should probably use the term, "health compassion."

Humans have the unique ability to elevate empathy to higher realms and in more complex situations, even to extend it to other species. Darwall (1997) compares sympathy to care as a synonym, but differentiates it from empathy. Whereas empathy is more a first-person experiencing something from another's standpoint, sympathy involves a caring response. He goes further to declare that empathy is dependent on the perspective of the observer and can range from indifference to deep, visceral feelings of sharing mental turmoil. Both empathy and sympathy are conditions of, but do not necessarily lead to, the act of compassion (Von Dietz, 2000).

Goetz, Keltner, and Simon-Thomas (2010) provided an evolutionary picture of compassion, referring to three different types as a trait that "enhances the welfare of vulnerable offspring.....a desirable emotion or attribute in mate selection processes and..... it enables cooperative relations with non-kin." (p. 354) It is the third evolution that gives rise to compassion in the healthcare context. Von Dietz and Orb (2000) attempted to define compassion as conceptually different from both sympathy and empathy. They describe compassion as having both an emotional component, but also what they term, a "rational dimension and.....deliberate altruistic participation in another person's suffering" (p. 168). The

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work setting in which clinicians practice is a highly stressful and demanding environment that leaves little time for compassion (Graber & Mitcham, 2004). The literature on compassion in healthcare professions continues to be scant, except in terms of compassion fatigue. Even though different conceptually, it is a term that continues to be used synonymously with empathy, sympathy, and caring. They are all often referred to as the most valuable attribute of healthcare, yet appear to be lacking (Schantz, 2007). The very fact that it must be defined and described in some detail speaks volumes as to the search for its true meaning.

Traditionally, medicine has been thought of as both a science and an art. Bronowski (1956) discusses the truthfulness of science, but also admits that the truth cannot be extricated from meaning. He implies that meaning is simply more challenging to communicate, but is an integral part of science. The science of healthcare has expanded exponentially. We are at the point where we can identify even pieces of a gene that will affect expressions of health and behavior. This enables very targeted interventions, giving rise to the terms precision, or personalized, medicine. Use of the term “personalized” can be misleading in that it is simply a misnomer, Aspinnall and Hamermesh (2007) go so far as to state that our outdated systems and even physicians create barriers that need to be surmounted, as if use of genomic medicine would constitute a new medical panacea. It does have promise, but overlooks an important factor, the human who owns the genes.

Almost 100 years ago, M. Adelaide Nutting, in a speech to students at the Vassar Training Camp on September 9, 1918 titled, “Apprenticeship to duty” stated,

We may have great and imposing buildings, the last word in hygienic and sanitary appliances, dazzling operation rooms and laboratories, but that stricken human being lying there has many needs that none of these can satisfy. We must lean also upon the soul and spirit of the place to sustain and strengthen him. Such a soul and spirit many generations of workers, nurses, doctors and others, have constantly striven to keep alive in our hospitals, (AJN, 1918, p162-163).

Though spoken years ago, this statement is as relevant today as it was then. We must continue to strive to care for the human, to keep the kindness and empathy necessary for the person to act.

Even so, there is a physiological cost to empathy and caring. Manczak, DeLongis and Chen (2015) describe an increased parental inflammatory response to empathy toward adolescents in parent/adolescent dyads. Even though increased empathy was beneficial to their children, it came at a cost to the parent. Bevans and Sternberg (2012) described a case study of a caregiver in which the caregiver experienced numerous negative physiological health effects. Of course, there is a growing body of literature explicating the psychological effects of caregiving, including compassion fatigue and caregiver burn out. However, this only serves to stress the importance of care for both patient and caregiver, because the physiological effects of being genuinely cared for are enormous. Lebowitz and Ahn (2014) discuss the positive outcomes based on a therapeutic relationship between clinician and patient. Some would suggest patient adherence to a medical regimen is greater in the presence of perceived empathy by the clinician through both social and neurobiological actions. (Decety & Fotopoulou, 2015; Kelley, Kraft-Todd, Schapira, Kossowsky, & Riess, 2014).



## In Examining the History of Caring

*There are three principal requirements in a medical man (sic passim): first, that he be skilled in the curative arts and familiar with the resources of the body, the powers of diseases, and the treatment to use for each illness; second, that he should be sincere and not have his eye on anything except the health of the patient, for many are led on by ambition or money to the point of administering poison instead of medicine; third, that he should pay close attention and take the necessary pains.*

Erasmus  
(Albury, 2001; p. 36)

Caring for the sick has ostensibly been done since the beginning of humanity, but has taken on numerous forms and been performed differently by different people. Philosophically speaking, using Laudan's Historico-Social assumption, one could surmise caring is a consistent feature of alleviating suffering (Laudan, 1977). Contextually, social scientists would say caring arose from the natural nurturing instinct of mother and child and was done by the women members of a tribe. However, despite the caring aspect carried out by women, the practice of medicine and rituals was performed by a medicine man, or shaman (Dock, 1920).

Greeks were the first to take care of the sick away from superstition and magic and into the realm of scientific and rational thought, based on nature (Longrigg, 1993). Interestingly, the Hippocratic Oath, purported to be written in the fourth century BCE, and which is used today as one of the oldest "rites of passage" into medicine, uses as its foundation, medical practice based on science rather than caring. The oath does not mention caring in the human sense of the word (Hulkower, 2010).

As humanity progressed in both knowledge and ability, there was a differentiation of duties, again according to those who healed and those who cared. Interestingly, Maggs (1996) identified a gap in historical accounts of nursing in which caring is consistently omitted in favor of political, social and demographic accounts of the progression of the profession. He asserts that throughout its history, nursing is simply an imitation of familial roles whereas the women assume the role of caregiver, thus yielding power to the more male medical roles. In his paper, he calls for a unification of theory and practice such that caring becomes part of the history of the profession.

Dock (1920) explained that the profession of nursing and of medicine closely parallels the standards of present humanity. Her lengthy *History of Nursing* follows the profession from ancient times to the modern day (at least in 1920). She discussed the impact of the Christian religion on the role of carrying out "God's work" in caring for the sick and the fact that, even though they had equal status in the early church, women were primarily the ones caring for the sick. Even during the Middle Ages, women held high-ranking positions in the monasteries, where hospitals were developed for housing the sick. During the Middle Ages those caring for the sick, both men and women (Dock, 1920), were from upper class families and this was considered part of their duties to society, especially during the Crusades; and institutions enjoyed the benefit of growth from land and monetary donations. However, in the thirteenth century, church oppression overshadowed growth of charitable monastic institutions. For example, in 1212 the Council of Bishops developed strict regulations for French hospitals and, in the name of efficiency, ordered patients to be cared for by as few Sisters as possible.

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This seriously affected the flourishing Hotel-Dieu in Paris, resulting in the Sisters' becoming cloistered and the degradation of their abilities. Because of this and the necessity to close huge numbers of hospitals, leaving few options for the poor, nurses at that time were drawn primarily from lower classes and were untrained, generating a disinterest to suffering (Dock 1920). Later, during the Renaissance, physicians were educated at universities while women simply took on the role of caregiver. One of the most immortalized stereotypical characters of that period was Charles Dickens' Sairy Gamp, a crude and untrained medical attendant who was given to drink. Some believed that women healers practiced among the commoners, yet were persecuted based on the existing political themes of the era, including religious persecution of women healers as witches (Ehrenreich & English, 1973).

Historically, war seems to hasten the proliferation of knowledge for the healthcare field. One of the most notable examples is Florence Nightingale's contributions to the significant decline in the mortality of soldiers simply based on keeping meticulous records and instituting sanitary conditions in the hospitals (Kopf, 1916). War is where advances in specific diseases and surgical innovation are used in an effort to improve survival rates and techniques (Bennett, 1990; Clifford, et al., 2014; Salcido, 2015; Dock 1920; Schwab, 2016)

A theme that seems to appear over and over again throughout the history of caring for the sick is one in which there is division of labor and differing roles in care of the sick. The "treating" role has traditionally been reserved for men, while the "caring" or "caregiver" roles were reserved for women. The medical profession seems to be cyclical, transitioning between lay and religious influences, and having periods where suffering and humanity were important and periods where this was not focal. Additionally, in most of the historical texts, the context of "caring" is not seen, except to mention its origins and the fact that it was separated into those who treated and those who cared for the sick. What has remained constant through the historical evolution of healthcare, though not always emphasized in the same way, was the fact that humans who are sick and suffering have basic needs to be treated humanely.

### Medicine as Big Business

It appears that the modern concept of healthcare is more business oriented than caring oriented. Currently, a basic motivation is to "process" as many patients through as possible to obtain the maximum reimbursement to meet the office overhead. So what has driven healthcare to this point? It is extremely complex and is not the subject of this article. However, it currently boils down to dollars and product lines. Moreover, contributing to the confusion is a lack of healthcare literacy, sometimes-unreasonable expectations by patients, and lack of insurability and healthcare access by the poor, causing them to use the emergency room for services because there, they will not be turned away (Joseph & Marrow, 2017).

Castano (2014) stated the business model should take precedent over the "oversimplifying approach to patient satisfaction with amenities and interpersonal skills..." He further posits that business models would do well to be substantially innovative. He does however, address the fact that patient-centeredness is an essential, but often overlooked component of such innovation. Angeli and Jaiswal (2016) go so far as to state that using efficient business models in underdeveloped countries can influence a decrease in poverty. Many espouse the notion that healthcare professionals also need to be educated in business practices to increase their



awareness to entrepreneurship and business acumen (Hill, 2014; Miron-Schatz, Schatz, Becker, Patel, & Eysenbach, 2014; Peterson, Adams, & Demuro, 2015; Castano, 2014)

Yamamoto (2013) distilled the cost of healthcare down to per capita spending for each age group, as if humans were simply a number on a graph. He further refined it to the type of insurance plan on which an individual was enrolled, which showed no significant differences. Devaraj, Ow & Kohli (2013) examined data from 567 hospitals and concluded that efficient flow of patients through a system positively affects performance and the quality of patient care. The question remains, however: What is meant by quality of patient care? Even more so, what is meant by the term “care.” In the business sense, it seems to mean treatment and prevention of a disease (Kahn, Maurer, Wartman & Sachs, 2014; Miron-Schatz, Schatz, Becker, Patel, & Eysenbach, 2014).

It appears in recent years, Accountable Care Organizations’ (ACO) patient care quality has been linked with lowering care costs as a method to manage healthcare. In her paper explaining the origins of the Affordable Care Act, nowhere does Quadagno (2014) mention caring, but rather government reform of the US healthcare system from an economic perspective. This is all well and good, but there is some literature where this can be found to be linked with patient perceptions. For example, Kerrissey, et al. (2017) conducted surveys of patients in structurally integrated care and found they perceived care was less integrated in patient-centered domains. By integrated, they meant a seamless organization of multiple caregivers to address the entirety of the patient’s health issues. A study by Fryer, Friedberg, Thompson, and Singer (2017) concluded that increased patient integration as reported by patients could improve efficiencies of the healthcare system. Nowhere in these studies did they include patient perceptions of the humanness of care delivered. Their surveys only included demographics and care utilization and how their care was administered across services. As well, some literature links ACOs to provider perceptions of healthcare based on utilitarian perspectives (Noble, Greenhalgh, & Casalino. 2014).

As of this writing, the United States is in the midst of a great debate on healthcare. The Affordable Care Act (ACA), was signed into law in 2010 and fully implemented in 2014. It was designed to provide greater healthcare equity to an increasing number of insured Americans. It created healthcare exchanges and a Medicaid expansion plan, using subsidies to insure more people. However, the result for many was a decrease in services covered and rising premiums (Joseph & Marrow, 2017; Gaffney & McCormick, 2017). Disagreement in Congress led to the creation of the American Health Care Act (ACHA) that would limit Medicaid expansion, eliminate the employer mandate and lower tax credits for lower and middle income Americans. Also known as the “repeal and replace,” this bill has failed to gain support enough to pass the Senate. What is most interesting in this entire discussion of American healthcare is what is not being said. What is missing is the patient, the human, and any mention of compassion or caring. Additionally, most of the literature did not mention sustainability of the flawed system. However, the Massachusetts Health Reform could serve as an example of longer-term effects of healthcare reform. Garabedian, Ross-Degnan, Soumerai, Choudhry, and Brown (2017) only make a passing mention of sustainability related to short-term enrollment of patients with higher costs. In all the literature, the business model seemed to be the intent of the primary discussion. There is much literature in educating healthcare professionals toward a business model of care and in improving business skills (Hill, 2014; Miron-Schatz, Schatz, Becker, Patel, & Eysenbach 2014; Kahn, Maurer, Wartman, & Sachs, 2014).

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In his speech to the Waldo Symposium, Gawthrop (1997) stated,

The façade of pretense applied in the name of public service tends to project bureaucracy in its most unfavorable light. If this perception is to be changed in the years ahead, it is incumbent upon public servants, individually as professionals and collectively as a profession, to create a new reality for themselves, a new image that rings true of a service in the name of democracy. (p. 205)

This is most certainly true of healthcare, if we are to move away from the hypocrisy of product lines and profits to a profession that genuinely cares about and sympathizes with those under our care. Patient engagement in their care should revolve around goal setting with patients, monitoring and reporting. Again this literature only implies these activities constitute caring and compassion, but business models typically lack in the humanity of caring.

Additionally, as the breadth and depth of new knowledge explodes, providers are hard-pressed to keep up; technology will be used more and more in diagnosing and recommending treatment for disease (Khan, Maurer, Wartman & Sachs, 2014). As they state, “...health care teams essentially become the human interface between patient and machine” (p. 1216). For example, the mobile health and related applications continue to grow at a deafening pace as more patients download personal applications related to tracking their health, making appointments and accessing records (Peterson, Adams, & DeMuro, 2015). Mobile health allows for patients to communicate with physicians’ offices without a personal interface. Despite widespread use, privacy concerns and safety issues continue to be worrisome to providers (Peterson, Adams, & DeMuro, 2015). There is a plethora of websites and blogs where health information is inaccurate. Yang, et al. (2017) describe robotic systems with differing levels of autonomy levels ranging from no autonomy to “full autonomy (no human needed).” Already robots are being used for telemedicine and are proposed for various tasks in hospitals and to perform transport, food delivery, information transmission (Rogatkin, 2016). Tanioka, Osaka, Locsin, Yasuhara, & Ito (2017), in a frightening article designed to assist in the theoretic development of Humanoid Nursing Robots (HNRs), discuss the need for some HNRs to have the ability to “care” and show empathy for those for whom they care. This is contextualized in the aging of the population and the need for eldercare. They speak in terms of these HNRs as replacing human-to-human interaction because of a severe shortage of human resources, as if the human capacity for caring will be exceeded. A very recent ad sent over the internet states, “Similarly, artificial intelligence will act as virtual clinical assistant, patient care bots and digital coaches which would enable mimicking one on one interaction that keeps patients disease free and happy.” (OmniMD, 2017). This is very frightening indeed.

Sim and Aida (2017) describe the attempt to synthesize molecular machines as the “Holy Grail” of future medicine. These tiny machines have promise in the specific endogenous treatment of disease and could be considered differently from their larger counterparts that might be expected to replace the human touch in medical and nursing care.

One of the most important impetuses driving the use of robotics is they are more cost effective than humans. Hamet and Tremblay (2017) suggest that avatars may be used to provide care for older adults because of more frequent conversation that is comforting and thoughtful. They do however admit that more research and evaluation needs to be done. Additionally,

ethical challenges should be scrutinized before use of robots becomes the standard. By no means could or should a robot replace caring human interaction, but as social media and electronic communication becomes more sophisticated and humans to interact from a distance, the slippery slope may not be far away.

One of the latest innovations is personalized medicine, which seems to be synonymous with precision medicine. In a 2007 article, Aspinall and Hamermesh speak of personalized medicine, but not in the human sense of the word. Instead, they detail a more genomic approach, using a patient's own genetic make-up and physiology to treat disease. Even this, though called personalized, is based on the patient's cells, not the patient. As well, Crawford et al (2014) outlined several institutional barriers of conducting genomic testing within academic medical centers. They concluded that the institution and its processes precluded the human side of caring for patients.

### Conclusion

Caring for and nurturing other human beings is and has always been the very root of healthcare in some fashion. At different times throughout our history, that purpose seems to have gotten lost in the weeds of the time. Currently, there is a pervasive atmosphere where genuine human caring is taking a back seat in health care. Additionally, our world has begun to go in a direction where our technology allows for non-human interaction. It is only too easy to hide behind the anonymity of a handheld device or computer to communicate with others. Our systems seem to be enamored with numbers as a metric for quality of care rather than stories or input from those being cared for as to how best to do that. The continued quest for the 'holy grail' of replacing humans with robots in an effort to achieve more efficiency will lead down a slippery slope from which there may be no recovery. Admittedly, as the population and lifespans increase, this necessitates finding other ways to use scarce resources, but it is not clear that it is better to seek to replace human-to-human interaction. To ignore the human in need of our care is not ethical, nor is it desirable. Humanity and dignity must be preserved.

A very interesting talk, given by Dr. Robert Sapolsky to the Stanford graduating class in 2009, stated that what makes us most unique as human beings is our ability to react to contradictory ideas. He stated, "At the end of the day, it is really impossible for one person to make a difference. And thus, the more clearly, absolutely, utterly, irrevocably, unchangeable clear it is, that it is impossible for you to make a difference and make the world better, the more you must." ([https://www.ted.com/talks/robert\\_sapolsky\\_the\\_uniqueness\\_of\\_humans](https://www.ted.com/talks/robert_sapolsky_the_uniqueness_of_humans))

Considering all that has been shared, permit me to provide some reflections from a personal perspective. As human beings we can, at our worst, hurt and injure one another; and, at our best, show genuine compassion and caring for each other. I, for one, as a human being, do not want to rely on a middleman to relay information back and forth between a machine and me. I would much rather spend more in order to be assured that I am listened to, and cared for, by another human being. We need to find our way again, remembering the basic human needs of those who need our help to alleviate their pain and/or suffering. Therefore, it is a moral imperative for us as healthcare providers to move beyond the business models, the barriers of complacency, the harsh work environments, and the incivility and begin to bring back the "care" into caring. We need to be intentional about patient-centeredness.

## Articles

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In light of this discussion, I wish to call for a change to the paradigm of our healthcare system such that health “care” truly becomes health caring as opposed to the current health product lines. How much difference can a single person make? This was clearly illustrated in a movie titled “Pay It Forward” in which a young schoolboy was assigned to find a way to change the work. He decided to do good deeds to others, without expectation of repayment in response to a good deed done to him. This created a cascade of good deeds that made a difference in the town surrounding this boy. In fact, there is even a movement called “Pay It Forward Day” in which 80 countries participate.

If there is any doubt about the difference one act can make, one only needs to read the short story titled “A Sound of Thunder” by Ray Bradbury to realize how one simple act has the ability to drastically change outcomes --- something our healthcare system is very concerned about, but cannot seem to grasp in the human sense of the concept. In this story, one has the ability to go back in time and hunt dinosaurs, but must stay on a path. One individual strayed off the path and killed a single butterfly, changing time forever. In the case of caring for a human, an act of concern and kindness could actually mean the difference between resignation of an illness and motivation toward health. It could mean the difference between a provider who is tired and ready to give up and a provider who gains the energy to keep going and pay the kindness forward.

When it comes to the need for more caring in our defunct healthcare system, there are more questions than answers, and numerous points to consider. What would be the results if healthcare professionals were to take the time to listen to a single patient on any given day? How might that change the face of healthcare, or the outcomes of that patient for the better? How might we act as an example for others to emulate? Can we encourage patients to assume responsibility for their own health rather than to leave it to the hands of others who are more interested in data points than the person? How can we use the information quite literally at our fingertips and leverage our technology to create a caring system? It only takes one person, one caring act, one at a time. What would it look like if multiple people committed abundant caring acts, many at a time? I highly suspect we could change the face of healthcare from a data driven, business model with dismal outcomes to a caring, efficient model where our patients not only feel well, but also feel good.

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