Creative Health Communication: Art Solutions for Unequal Medical Care

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Introduction

Effective medical communication is the basis for humane patient treatment. Breakdown in medical communication can leave the patient confused and scared, unaware of what procedures will be performed and why this course of treatment is necessary. The patient is dehumanized into an object the physician can use to practice procedures. Without proper communication, a patient can neither truly give informed consent nor truly be treated with respect.

Inadequate medical communication can be caused by cultural, economic, educational, and language barriers in addition to qualities the physician possesses, such as personal and medical background, education, and personal biases. Degrees of separation, when the physician cannot immediately relate to the patient, can make communication difficult. The obstacle of differing backgrounds is amplified by decreased communicative ability of the patient, such as would be found in an autistic individual. It is an ethical mandate to strive for the most effective communication for the autistic population and grant these individuals the respect they deserve by attempting communication using any methods at a doctor’s disposal. This problem becomes an ethical issue because effective medical communication has been shown to lead to better health outcomes, therefore medical communication is a moral imperative to achieve better quality of life.

In this thesis, I will present a case study from my work with residents from the Center for Autism and Developmental Disabilities at Bradley Hospital in Rhode Island to demonstrate the communication problem within this community and a possible solution to that problem. The problem is inadequate medical communication with a community that inherently has difficulty
with human interaction, and the solution is to introduce the language of art which bypasses the inherent miscommunication in this interaction. This language allows the patient to communicate to the physician and the physician to communicate to the patient, in addition to enhancing understanding between the two.

This language of creativity should be introduced to physicians in their medical school education and continuous creative education should follow throughout a physician’s medical career. With education in different media, a physician can adapt communication style and approach depending on the requirements of each individual patient. I will explore different forms of creative education and their effect on communication, as well as further benefits to the physician’s medical encounters.
Section 1: Medical Communication Disparity

Currently, communication in the medical arena is inadequate, and that fault leads to a lesser quality of life for the patient. While this defect can be traced back to both the physician and the patient, there must be a change to the system and the standard interpretation of clinical dialogue in order to improve healthcare for the greater population. The following will establish an understanding of the fundamental fault in medical communication, a foundation to build upon when exploring the problem and possible solution within a specific population’s experience.

Deveugele et al. (2005) explains the research she conducted where she concluded, “adequate doctor–patient communication is related to better health outcomes, better compliance and higher satisfaction of both doctor and patient” (265). Thus communication is an essential ingredient for better patient care and more efficient and effective treatment. This rationale follows because if the patient maintains an understanding of the physician’s recommendations and why the treatment is necessary, he will be more likely to understand how essential compliance is to a successful recovery.

For example: a patient needs medication for a certain ailment that requires timely and consistent ingestion of a pill. If she doesn’t understand that the treatment is for five days regardless of how she feels, she may stop taking the medication if she feels better after four days. This misunderstanding can result in a possible recurrence of the ailment. The same reasoning holds true for miscommunication with a patient in a splint who doesn’t comply and further injures themselves. The rational persists for a patient who walks in for a colonoscopy and uses red Gatorade in the prep because the purpose of the preparation wasn’t adequately explained. The artificial red in the Gatorade may make the fluid in the colon appear similar to blood and
cause a subsequent misdiagnosis. If this possible consequence isn’t understood, the correct
guidelines for preparation might not be followed.

Deveugele’s research also shows that, “letting patients fully express themselves, asking
questions about their illness experience and giving support may contribute to promote health
outcomes” (266). By asking the patient about his own experience, the physician gives the patient
leave to communicate. Communication is a two way street; the physician communicating with
the patient is not the only influential factor. Effective communication from the patient to the
physician must also be involved. This dialogue is facilitated by the physician only if the
physician is willing to spend the time and energy necessary to elicit the communication from the
patient, which won’t happen unless the physician realizes the importance of this dialogue to
successful treatment of the patient. Thus the time and energy invested in this positive interaction
and belief in the patient’s own power to communicate can influence her overall health.

Hargie et al. (1998) states that, “It is now widely accepted that effective interpersonal
communication is at the heart of quality health care delivery but that current standards in
medicine must be improved (Numann 1988; Cowan et al. 1992)” (25). Hargie in 1998 uses
research dating back to 1988 to establish the long accepted evidence proving the importance of
medical communication. As an accepted fact, and as a standard that “must be improved,”
resources must be dedicated to the pursuit of these improvements. This quote, and the use of the
word “must” by Hargie functions as a request for prompt attention.

Effective communication is essential to a medical encounter. Innovation in research
surrounding transmission of information between patient and physician and a recalibration of
priorities to expedite the improvement of medical communication to reach advancement in patient care and patient health must become the objective.
Section 2: Degrees of Separation Contribute to Unequal Care

Differences between a patient and a physician can lead to unequal care, a problem which will become more pronounced when discussing the care of patients with developmental disabilities. A more general understanding of how the differences between patient and physician affect care will contextualize discussion of the treatment of autistic individuals and will refute any assumptions of the impartiality of medical professionalism.

Health care professionals are expected to be objective and calm during patient visits for the most effective communicative experience. Medical professionalism dictates that the physician should not be affected by the type of individual treated, and should treat each person the same regardless of their background or the physician’s own biases: the physician should adopt the attitude of universalism. Universalism can be interpreted as the essential human sameness of patients. This expectation, while admirable, is not applied in practice, as stated by Hall and Roter (2013):

Contrary to the stereotype of physicians as consistent and neutral in their interpersonal behaviors, there is much evidence that affective quality of interactions varies a great deal, and furthermore that level of affect (anger, for example) displayed by the patient is reflected back in the physician’s nonverbal behavior and vice versa (Hall, Roter, & Rand, 1981). (51)

While objectivity is expected from a physician, when physicians allow themselves to recognize and be influenced by their stereotypes and the multiplicity of differences between themselves and their patients, unequal care can result. Hall and Roter also indicated how these differences can lead to faulty communication and disparities in care:

“There may be unintended violations of universalism due to miscommunication, with patients from lower socioeconomic backgrounds not making their desire for information clear to physicians, as suggested by Waitzkin (1985); divergent response tendencies of patients, for instance more asking of questions by female patients, leading to more
information directed toward female compared with male patients; and finally, perhaps there are unconscious violations of a universalistic orientation through stereotypes, dislike, and prejudice, as in interaction with unlikable or “difficult” patients.” (53)

Unequal care is explained above in terms of socioeconomic background, gendered tendencies, and preconceived notions of the patient; unequal care is shaped by the biases of the physician and the ingrained actions of different groups in communicative situations with a physician. These different factors are all violations of universalism.

It should be noted these “unintended violations” are more dangerous than the intended because the unintended can become an unconscious constant in care. That this action is unconscious makes it harder to address because it indicates that the physician is not aware of the violation and therefore cannot actively work to change the behavior. Physicians must be alerted to the issue of disparity in care and biases in their own practice in order to lessen those disparities and increase quality of care for all individuals. Early and constant exposure to these concepts of universalism and identifying where the term and its implementation are violated will help address this unconscious bias.

Physicians’ unconscious violations due to “difficult” patients presents particularly unfortunate consequences. “Difficult” patients come in all forms: they can be uncooperative, uneducated, or have an innate difficulty in communicating. Instead of dismissing those deemed “difficult,” communication impasse creates imperative for the physician to adjust to patient difference and use alternative means to access this patient, and allow the patient to communicate with the physician. Just as a foreign language speaker has a translator in the room to talk to the physician, there must be a tool of translation to bypass the barrier between physician and patient,
especially if that patient is inherently less able to communicate. I posit, as will be further explained in later sections, that art can function as this tool of effective translation.

One of the fundamental principles of medicine as outlined in the *Annals of Internal Medicine* (2002) is the “principle of social justice. [...] Physicians should work actively to eliminate discrimination in health care, whether based on race, gender, socioeconomic status, ethnicity, religion, or any other social category” (244). It is therefore unethical to not bridge communication gaps and not “work actively” to improve the healthcare of minority communities. Minority communities include those indicated above, but also include other often ignored categories of gender identity, sexual orientation, and ability. Ability relates directly to that individual’s medical status, however is not addressed in the above quote when discussing social categories, and if not included in such categories can be left out of the discussion. Translation might be more crucial for people at different levels of developmental, cognitive, physical, medical or other disability, and attention should be paid particularly to addressing communication deficits for these communities whose daily lives are so entwined with the care they receive from the medical community. This ethical imperative is what has driven me to seek a resolution to the deficiency in medical communication to try to close the gap in care for individuals with communication skills different from the physician. The resolution I propose is a shared, alternative language between the patient and physician and a creative education for the aspiring physician. This solution will improve medical communication for individuals of all backgrounds, and especially autism spectrum persons that, per their diagnosis, have more difficulty communicating.
The negative effects of universalism are manifested in its implementation. While treating each patient the same is vital, active blindness to differences in patient need can be debilitating to the medical profession. Physician blindness to context and circumstance of a patient is detrimental to patient care and allows that physician to prescribe treatment that could be infeasible for a patient. For example, two patients who both have broken legs when one is homeless and the other has much social support must be treated differently. Simple access to ice, ability to rest one’s leg, or possession of health insurance can change treatment drastically. Similarly physician blindness to cultural context, background or ability of the patient and stalwart reliance on a traditional communication can be detrimental to the physician’s ability to access patients with methods those individuals can comprehend. Applying creativity to the medical encounter can allow for active subversion of universalism in a positive way, employing creative problem solving to subvert the differences between people to reach a universal ideal of understanding at the conclusion of each individual’s contact with a medical figure.
Section 3: Care for Autistic Patients

When assessing care of autistic patients, it is relevant and important to first understand that a main criterion for the diagnosis of autism is communicative ability. Because I am directly addressing the communicative ability of these individuals in the medical setting and aspire to improve that communication, it will be important to note the types of communication that are available to these individuals. From the Diagnostic and Statistical Manual of Mental Disorders (DSM) IV:

Qualitative impairments in communication as manifested by at least one of the following:
- delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime)
- in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others
- stereotyped and repetitive use of language or idiosyncratic language
- lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level

Autistic individuals therefore, by definition, have communication impairments that deal primarily with spoken language. These communication impairments necessitate the utilization of a distinct language that is accessible to this community. This language needs to be nonverbal, and possibly non gesticulative.

Krauss et al. (2003) found that, “Results from a national survey indicate that over a third of the children with autism, over a fifth with mental retardation, and over a fifth with other types of special health care needs had problems obtaining needed care from specialty doctors in the preceding year” (329). Krauss additionally found that, “Children with unstable health conditions, autism, or those whose parent was in poor health were at greater risk for problems” (329). The children with developmental and cognitive disorders were not receiving the proper care from
Liptak and Orlando et al. (2006) found that, “physicians' knowledge about complementary and alternative medicine and their qualifications to manage developmental disabilities ranked worse than neutral” (245). The unequal care of autistic patients may be unconscious simply because the physicians aren’t qualified to “manage developmental disabilities,” but that should be a fixable deficit with proper education. If there is such a simple solution, then why hasn’t the problem been fixed? Interested groups/individuals and the physicians themselves must actively pursue their own education and that of the rest of the community so that every individual with this deficit can begin to understand how to communicate with the autistic population. I propose an introduction of art into these medical encounters, in addition to including alternative interaction methods instruction in premedical education, medical education, and physician training.
Section 4: A Proposal for Communication through Art

In my work, I have focused specifically on autistic patients who have inherently impaired communicative ability, patients who have seen less than adequate care according to the presented statistics. My solution takes slight re-imagining of art and of the physician’s exam room. Art must be seen as a universal, nonverbal, tactile, visual language that can be accessed by any individual who cares to engage with it. Art is a form of communication that can speak between individuals: it doesn’t just provide knowledge from one individual to another. The physician’s exam room then can utilize this material to access and engage their patients. Art then functions to inform patients so they can give informed consent. Art functions to show the patient that the physician respects her enough to sit down and spend the time to make sure she understands her body. Art functions to bring together two individuals regardless of background or ability.

The solution I propose comes in the form of a universal language: Art. Mothersill (1965) writes a full article around the statement that, “everything points to the conclusion that the phrase ‘language of art’ is more than a loose metaphor” (559). When art is referred to as a language, it is not just a figure of speech, it indicates something more. Art can function as a language because it can be used to communicate.

Art is a tactile language. A person can engage with the material with their hands and begin to understand the medium with other senses. Most other forms of communication don’t involve all senses, only hearing. Alvarez (2005) explains the importance of tactile language:

Memories and associations are triggered and take hold more readily through the senses, especially those of touch, taste and smell, than through sound and sight alone, allowing abstract experiences to connect with concrete ones. Studies have found that encouraging students to investigate an object through touch increases attention to learning and time spent with it, thereby increasing the chances of understanding and retaining information about the work. (1)
A physician tries to connect with the patient and explain a concept that may or may not be a visible phenomenon. The process of taking the abstract and transforming it to a concrete experience can solidify the idea in the mind of the patients and allow them to understand the concept more easily and more completely. The more completely someone is engaged in an activity, the more that activity is likely to make an impression. The investigation and curiosity involved in art propels an experience to a level of engagement with the material, and invests the individual in the material and in the desire to understand it more fully. Retaining the information is also crucial, because being told about a concept and indicating an understanding of the concept doesn’t necessarily ensure effective communication. Retention is another important facet of communication.

Because art functions as a visual language, it can be an effective mode of communication with an autistic individual. Grandin (1995), a “high functioning person with autism” wrote to greater clarify thought processes within this population. Grandin explains that, “virtually everybody near the Kanner end of the spectrum uses visual modes of thought” (141) and some have no “language-based memory” (143) but instead visualize nonvisual information to enter it into memory. Kanner type autism involves a highly visual thinking method. When attempting to learn a foreign language, Grandin explains that she would “have to see the word in print and convert it to a picture in order to store it” (144). In order to engage this population and communicate to them, thinking methods must be taken into account. Patients within this population must be accessed on their most comfortable and understandable mode of thinking and communication, and if they are not, the physician isn’t appropriately communicating with the patient in a way that would promote the best health and health care. The type of information that
is “understandable” to these patients is very different than the greater population. These patients need the visual and tactile conversation instead of the verbal communication. Art can translate the verbal into the visual, turning what was previously a verbal conversation into a visual conversation that the patient can engage in more thoroughly.

Autistic patients can become dehumanized because they don’t use the verbal language as effectively as other individuals, but they have not been approached with a different, nonverbal language that could assist communication. Engel (1979) explains that standard schooling conflates the educated mind with an individuals mastery of language. Engel states that “the negative implications of this mistaken notion were made manifest in the treatment of the deaf, the language-impaired, the learning-disabled, dyslexics, and the host of handicapped children and adults who were treated as if they were less bright, less capable, less creative, less thoughtful, and indeed, less than human” (312). This dehumanization in unacceptable in schools, but it is perhaps even more dangerous in the physician’s office. In the doctor’s office it can both lead to a patronization of the individual and to miscommunication, lack of attempt at communication, unfair treatment of an individual, and inadequate care.

Communication through art has been integral to artists and societies alike throughout history, showing that thinking of art as a communicative tool is not a novel thought, and that property of art can conceivably be transferred into another realm. Hume (2008) explains that, “in most cultures for most of human history, the creation of art has been a socially organized activity, central to the communication of shared religious beliefs, mythic understandings of the world, and social relations.” The communicative power of art has been used throughout history from ancient pictographs to religious stained glass to simple expressions of love from child to parent. It is time
to transfer the communicative properties of art from one realm of human expression to another, from history to the doctor’s office.

Art is a dialogue, and a conversation that both patient and physician can invest themselves in. As Martin (2013) explains: art is “a visual tool for communication, a window to the imagination, and a motivation to make connections” (1). This motivating force will persuade the patient to want to comply and want to understand what the physician explains. The “window to the imagination” aspect of art is also important because it allows the physician an understanding of the patient and it allows the patient to communicate with the physician instead of solely the other way around. Art functions as a multi-participant dialogue, not just a purveyor of information.
Section 5: Case Study: Bradley Hospital’s Center for Autism and Developmental Disabilities

Having set up the broad framework of my proposal, I now move to demonstrate it using case studies. I spent ten weeks working with individuals in the residential homes of Bradley Hospital’s Center for Autism and Developmental Diseases in Rhode Island where I conducted clinical research to test art’s ability to communicate about health and the body to a population of people that has communication impairments. I devised five different projects to teach five different aspects of health, and tested each twice: once at Heritage House and once at Rumford house over a ten week period. I asked the residents questions before and after each project to assess whether the art intervention increases their knowledge of certain health issues. After each of the sessions, the Bradley staff members were presented with an evaluation to assess my project and my interactions with the residents and were asked for suggestions. Most of the sessions were audio recorded for further analysis. Understanding the effect of art, and the ability of art as a teaching tool for a community of residents who have difficulty with communication, can help validate the use of art as a communication tool in the medical setting.

Below is a description of each activity I created for the two groups:

**Body/Organs (2/12, 3/19):**

This first project described human anatomy which was then used as a background for the rest of the projects. The activity began with one resident lying down on a large sheet of paper and traced by another resident. In addition, I brought a 3D model of the body with removable organs for the residents to look at and replicate with clay. They placed their clay organs on the traced outline of the body and we discussed each organ, explaining its function in the body while constantly referring to concrete actions in the resident’s own body to anchor their thoughts and
understanding. We then used red yarn to mimic blood flow through the body and described the role of blood in creating energy.

**Too Much Sugar (2/26, 4/9):**

We examined different foods by measuring out the amount of sugar contained in each to make it easy for the residents to visualize what “x” amount of sugar really looks like. This activity included soda, fruit, candy bars, and other items that they were accustomed to seeing and the goal was to communicate that too much sugar can repress the immune system. For this project, I gave each resident a role, with a job and a name tag. They each represented either the “healthy,” “sick,” or “doctor.” The “healthy” individuals must avoid the “sick.” The “sick” avoid the “doctor” and try to turn the “healthy” “sick.” Finally the “doctor” tries to cure the “sick.” There were enough Rumford house participants so that each character role was played by a different resident with the help of two staff members, but because Heritage House had fewer participants, we performed the same activity in a board game form. After completing the activity once where each character was able to move one step/square, all of the sick individuals became healthy. Then I replicated the effects of sugar by having each of the sick individuals move three steps for every one step the doctors and healthy individuals took. This part of the activity ended with all of the healthy characters now sick. This activity mirrors the effects of sugar because individuals who ingest large amounts of sugar have a dampened immune system allowing them to contract illnesses easier than those with a more balanced diet. Because the immune system is largely a conglomeration of different cells running into each other and improvising, this project became a performance piece exploring this improvisation and how it can play out.

**Exercise (2/19, 4/2):**
This project focused on the effect of exercise on the brain, including creating new brain cells, releasing endorphins into the system, and forming new connections between brain cells. The residents tied yellow cables of different lengths together in knots and taped them together. I placed a bag of happy-face bouncy balls inside this knot. To demonstrate the effects of stress and aging, the residents cut certain wires and connections. Exercise was then demonstrated through the addition of new blue wires and new attachments between new wires and old, and old wires with other old wires. The residents cut the bag to release the bouncy balls, replicating the release of endorphins due to exercise. We cut the bag over the body from the first activity to show that the endorphins are released into the body.

I connected the idea of exercise resulting in euphoria to the residents’ experience with special olympics, the YMCA, swimming, and their other activities. Also, at Rumford House, per a suggestion from a staff member at Heritage House, I asked the residents to exercise before they could attach one wire to the brain, directly tying the effect of exercise to the addition of the wires.

**Clean Hands (3/5, 4/16):**

In this activity, dye released from a clay nose and glitter on the counter represented germs that are present in everyday encounters. The dye released from the nose replicated swiping one’s nose and the glitter was bacteria normally found on countertops. These different “germs” were collected on gloves the residents wore on their hands. The “germs” stayed on their gloves while the residents mixed the resin together with their gloved hands. The dye and glitter were both present in the final product exposing “germs” gathered on their hands. After this experience, they washed their gloves with water and soap and mixed resin with their gloves once again. Either
showed that hands were washed adequately resulting in a clear pendent, or hands were not washed effectively resulting in glitter in their second pendent. The residents were able to relate “lack of infection” to adequate washing, and “infection” to various forms of germs that they picked up and didn’t effectively wash off.

**Dental Hygiene (3/15, 4/23):**

In preparation for this exercise, I carved teeth out of styrofoam, cut them in half, embedded a blue wire “nerve” in the tooth, glued them back together, and embedded them into wicker “gums.” There was a top and bottom to allow for a chewing motion. The residents each made their own food out of clay which we then took turns chomping with the teeth. After each resident’s clay food was eaten by the teeth, we demonstrated what would happen to unbrushed teeth where the food was able to just sit and rot away at the enamel. Wherever the clay was left on the teeth, each of the residents dug into the styrofoam with a spoon until they hit the cable, demonstrating that food left in our teeth either by not brushing or not flossing will eat into the teeth until it infects the underlying tissue. We then observed dental molds of both healthy teeth and of gums that were missing a few or all of the teeth and needed dentures. Through this process, the residents were able to see first hand the repercussions of not brushing/flossing their teeth.

When devising these projects, I considered what forms of art would be most appropriate for each individual and the group collective to ensure both enjoyment and engagement. I elicited as much information as possible from the director of the residential program at Bradley, but also remained attentive to all fears and qualms raised by residents and staff during the lessons. Many
concerns aired by the residents were connected to maintaining their personal cleanliness, often temporarily sidelined as a consequence of art projects. In order to mitigate that fear, I made sure that each project could be completed while wearing gloves if necessary, and verbally reassured the residents of cleanliness of material and impermanence of material if it were to touch their hands. I also sought variation in the types of experiences offered, so that if one individual wasn't pleased with the project a certain week, I could then offer reassurance of complete difference the following week. This reassurance could propel activity through that lesson in favor of the next. I strove for variation for another reason as well: to test the expansive nature of creative communication and its ability to connect people with information in a different way.

When exploring sugar's effect on the immune system capabilities, I employed the creative communication of games and play. As individuals extremely connected and familiar with games, be it Pokemon on their gameboy or baseball at the Special Olympics, they were familiar with the inherent strategy, frustration, and fun that is associated with play. I took the notion of games and turned it into an educational form for that afternoon. With the combined kinesthetic, visual, and auditory forms of learning in the "game" format, I was able to offer the residents different avenues through which to access the day’s material and absorb from whichever learning style was best for them. As Naps et al. explained, “there is no single visualization system or activity that is best for all learners” (3). Offering different systems with which the residents can access the information is imperative to every lesson.

Before deciding on the topics to address in the five activities, I consulted with the head of the two residential homes to find out in which areas I would be most helpful. I learned from her that two of the biggest arguments between staff and residents at the homes were over brushing
teeth and washing hands. After talking further, I gleaned that behind the argument was a fundamental misunderstanding and lack of education on the basis for these actions they were told to do. They lacked an explanation of “why” behind these chores. Without knowledge of why oral hygiene was important, brushing one's teeth is then a meaningless, time-consuming activity. The disparity between an activity and a comprehension of rational can serve to render an activity tiresome and seemingly worthless. I then identified a few essential healthy behaviors of exercise, oral hygiene, sugar avoidance, and hand hygiene. I determined to explain the "why" behind each of these activities and how they relate to their bodies and health.

Educating a group of people on a phenomena that they themselves cannot witness requires an externalization of those concepts. Transforming the abstract into the tangible can allow students to connect the concept with something they can install in their visual memory, and use their own perceptive abilities to engage with. The lessons I created then gave the microscopic and internal processes of the body visual and physical representations.

From this experience I found that the residents, while they usually didn’t understand everything (and sometimes anything) about the subject before we started the activity, had a firm grasp of the intended lesson by the end. After each session I asked the same questions that I presented at the beginning of the day to assess knowledge gained versus preliminary understanding. I found definite knowledge acquisition from the activities. This case study shows that art can function as a tool of communication to inform people with developmental disorders about their health and their body. This type of information translates immediately to the
physician’s exam room, and justifies the use of art to explain diagnosis and treatment to aid the overall conversation between physician and patient.

These activities were successful for a variety of reasons, mostly because of active engagement, tactile occupation, and fun. After each activity I asked the residents if they had fun that day, and every week they responded affirmatively. I believe that this motivation has a lot to do with the success of the experiment and their knowledge acquisition. Because they were so thoroughly engaged, they were able to transform the abstract knowledge I was trying to impart into a concrete encounter with the knowledge. Because germs were transformed from this theoretical “thing” into the dye and the flecks of glitter, they were given the chance to see what it is that they are washing off their hands. Allowing each resident to use their hands to mold an organ gave them a tactile experience that reinforced their understanding of what an organ is and what each one does. Because each resident was able to take the red yarn and give blood to the stomach and take that blood and bring it back to the heart so that it could then be pumped to a different part of the body gave them a visual model of how the blood flows in the body. Because the residents could do a push up and earn one wire to add to the brain, they were able to personally draw the correlation between exercise and the addition of cells to the brain and reparation to old broken cells.

From personal experience, I have found that if a person is told to do something and isn’t given the “why,” compliance is unlikely. However, if they understand the repercussions of failing to act in a certain way, and why it would be beneficial to perform the activity, they might be more inclined to pay attention to that fact when the time comes. Through these activities, I gave the residents the “why’s” to the directions they were given by their staff every day: directions
like “wash you hands,” “brush your teeth,” “don’t forget to floss,” “that has too much sugar,” and “lets go out and get some exercise.” Now that the residents understand why they should listen to these directions, they should be more likely to comply with the requests. This direct application of knowledge to an activity allowed some theoretic lesson to become an experience committed to memory, and these experiences are directly related to their everyday health and wellbeing.

Dale\textsuperscript{1} is one of the residents at Rumford House. He has very limited communicative ability, but tries to convey certain messages with very disjointed words. While I stood by him and attempted to draw the connection between the giant styrofoam version of the teeth and his own mouth, I showed him where to take the spoon and dig out the tooth. I ended up using single words that would convey pain while looking at the cables that were displayed elsewhere in the model from the other residents. As soon as his own spoon hit the blue and broke through the styrofoam he looked directly at me and said “ouch.” With that single word declaration, I could ascertain that he understood the lesson. A physician can explain an idea to an autistic patient and depending on the severity, maybe the explanation will be understood, but most likely not because it is communication via spoken language. If the physician, however, can figure out how to incorporate art into the dialogue between him and the patient, then the two might be able to better understand one another.

\textsuperscript{1} Name is changed to protect privacy.
Section 6: Art in the Physician’s office

There is an important problem with medical communication and a concerning disparity in care. The autistic population has intrinsic difficulty with communication, and that should not disadvantage these individuals from the highest level of medical care, but that is the result in the current climate. My own experience with this population through my clinical research at Bradley hospital has shown that art can function as an effective way to communicate an issue relating to the health of the individual. This finding can be taken into the physician’s office to aid communication between these individuals and the physician. Art can facilitate a dialogue between the two parties and bridge the differences between the two to reach effective communication. Thus, I propose the integration of art into the physician’s practice to adhere to the “principle of social justice” and the use of art to actively pursue a solution to disparity in care of the autistic population.

Art will give the autistic patient a voice with which to communicate directly to the physician. Art will give the physician a medium through which she can effectively communicate to the patient in a memorable and easily understandable fashion. Art will give the patient a better quality of care and thus promote the best quality of life possible. This incorporation of art into physicians’ offices will not only help the autistic community, but any others that are faced with difficulty in verbal communication. Allowing the entrance of a bridging language of creativity to explain medical jargon in another way can connect the physician and patient in the times when simple verbal communications prove ineffective. With an education in creative means of expression, the practitioner will also benefit from forced critical observation and from greater adaptability and creative problem solving skills.
An example of a simple creative form of communication is a trifold pamphlet I designed with two peers entitled "My Care Plan" (see Appendix). This communication tool has been adopted as a prototype by multiple oncologists and is in circulation among the new breast cancer patient population in Miriam Hospital and Rhode Island Hospital. The impetus for this design was the frozen state many patients enter into when receiving a life-threatening diagnosis. The patient in this state may not hear nor understand what they are told after they hear the word “cancer.” While these individuals may not have communication deficits in everyday life, that diagnosis can create a temporary failure to communicate. This pamphlet provides an aesthetically soft palate and nonthreatening pictorial representation of a chest to prompt a physician to draw a visual depiction of relative size and placement of a cancerous mass and any spreading cancer. This template becomes a tool to convey the physician’s expertise in a way that ensures understanding and memory of the conversation.

Also included in this pamphlet are suggested questions the patient can ask the physician. Thinking of these desired communications on the spot in that high pressure environment can be difficult. Providing the patient with a springboard to communication can prove helpful for both the patient and physician to effectively use the time they have together. By portioning off sections of the pamphlet for different physicians on a particular individual’s care team, it becomes not only a force to facilitate physician–patient communication, but to facilitate inter-physician communication as well. The subsequent physicians can read the discussions other specialists had with the patient. Not only a benefit for the physician, the patient also enjoys a sense of continuity between specialists in the course of their care. Patients receive a personalized memory aid while physicians receive a tool to more efficiently practice their craft.
Another example of easy creative communication in the physician’s office is the use of children's modeling clay. While the previous example uses a third party product that was made with an understanding of creative communication, ready access to moldable clay can be an easy illustrator for the physician to use without any outside assistance. To illustrate to a patient the size of a polyp that a gastroenterologist found during a colonoscopy, a physician can make a simple clay replica of a polyp for the patient to see. If two dimensional representation is easier for the physician, the act of drawing the size on a scrap of paper can ground the medical jargon in a concrete visual representation.

Another instance of creative communication is the attempt to describe pain level and type of pain. Many patients can find that descriptors escape them in these instances, and might prefer a picture. While physicians use trigger words such as “stabbing pain” or “slow burn” to help understand the source of pain, a drawing by the patient would accomplish the same goals. This representation can also eliminate the temporal problem of pain memory, i.e. it is hard to describe or remember how exactly how a pain felt after it is gone. If the ailment is an intermittent pain, physicians can request the patient draw the pain whenever she experiences it to give the physician insight into the type and source of pain that plagues the patient.

These examples are just a few of the ways a physician can incorporate creative communication into everyday practice to more effectively care for patients. Every person has days where communication is more difficult than others, especially if that person is experiencing pain or has recently been faced with a life-altering diagnosis. Whether helping those who by the nature of their diagnoses have lower communication abilities, or helping those who ordinarily
speak with eloquence, creative communication bridges can adapt to each individual and change the medical paradigm for the better.
Section 7: Ethical Motivations

Art can function as a solution to the present ethical problems of inadequate medical communication, especially as it pertains to the autistic community. There is an ethical imperative for improved medical communication for the autistic community as derived from the issues of unequal care, dehumanization, respect, and informed consent.

In addition to the ethical issues presented by the unequal care that results from inadequate medical communication, as evidenced by the “principle of social justice” mentioned earlier, another result is disrespectful behavior and dehumanization of the patient by the physician. A study by Beach et al. (2006) showed, “patients are generally aware of the degree to which their physicians respect them, and that the degree of respect that a physician feels towards a particular patient is significantly associated with the physician’s communication behaviors in an encounter with that patient” (6). Thus inadequate communication with the patient is correlated with lesser respect for that patient. Spending the time to walk through an issue with a patient through the medium of art, thus effectively communicating, allows the patient to feel more respected and valued as a person. An autistic individual should be treated with the same respect as the normal population regarding medical care, but if the physician does not attempt to fix the problem of communication, there is inherently less respect inferred by the patient.

Better access to this patient population will allow for the patient to be the most informed they can possibly be so that they can give their consent and help decide the course of action. As Berg et al. (2001) explains, informed consent is an ethical ideal and legal doctrine. For an individual to be informed enough about their health, there must be effective communication, and this communication must lead to recognition and understanding. One way to reach the highest
possible level of communication for an autistic patient would be through the medium of art. Therefore the ethical imperative of informed consent makes my pursuit of better communication through art an ethical imperative itself.
Section 8: Introduction of Creative Instruction into Medical Education

“Even as we strive to improve the consistency of care—and striving is clearly a very good idea—we must continue to cultivate novelty and originality, rather than penalize it. Imagination is perhaps the most essential trait that medicine, and medical insurers, must again learn to recognize and reward. Even with the best algorithms and the brightest computers, the future of health care ultimately depends upon the creativity of the hardy men and women still entrusted with its delivery.” (177)

- Shaywitz (2004)

The word that rounds out this quote by Shaywitz is “delivery.” This word in context could be interpreted as the interaction between the physician and the patient. Thus he places this interaction as the reason humans will always be indispensable in the medical process. The human aspect of the profession is the delivery, and in that communication between physician and patient, imagination and originality should be the ideal that is cultivated and praised. Sataloff (1998) suggests revising the norm to create an interdisciplinary system, arguing, “Whether we work with tertiary care surgeons to resect the ‘unresectable,’ or with poets to find new ways to hear and talk with our distraught patients, medicine remains a viable option for the imaginative, creative physician” (530). He sees how the minds and skills of individuals in different realms of understanding and thinking can assist the physician in all worlds of interaction. By specifically identifying the role of a creative professional, he shows how learning different mediums of communication can help access patients who would otherwise be lost to lack of understanding in a medical encounter. The ideal would be to combine the poet and physician within their medical training. By providing future physicians with the education necessary to provide the tools to bridge communication gaps themselves, they can more efficiently and effectively access their patients with an individualistic lens. These tools can come in the form of written, artistic, and performative training.
All forms of creativity lend to the adaptivity necessary to access physician-patient communication. Not only is adaptation a large part of communication, it is a central skill to the everyday activities of the physician. Every time new tests are ordered, the physician has to reconcile the new information with the old to create a coherent and cohesive diagnosis and treatment. The doctor cannot be stalwart in a diagnosis, for these assumptions might preclude helpful treatment. Similarly in art, when a sculpture starts to collapse in upon itself, the artist needs to take a new approach and reconcile structural integrity with the aesthetic goal. When a writing student delves into screenwriting, they must adapt to the confines of that medium in order to succeed.

Pre-medical and medical students often solely focus on the sciences, completely omitting creative thinking through an arts making process, leaving them at a disadvantage when they become practicing physicians. Introducing a concurrent form of education that focuses on reshaping the pre-medical students’ perception of doctoring through creative thinking before entering medical school and during medical school, can effectively redefine classical medical preparation, and transform students’ thought processes, forming a more creative and innovative view of medicine.

Most medical students aspire to become physicians that have the ability to communicate and adapt to patients’ needs. Throughout a medical education and career, the artistic skills of adaptation, creative problem solving, critical observation, spacial understanding, and communication can function as tools for every day practice. Concurrent creativity instruction can both enhance skills inherent to art and understand those teachings in relation to doctoring. This instruction exposes the physician and aspiring physician to different forms of creativity that enhances communication directly by supplying another medium with which to communicate, but
also in giving the physician a greater understanding of adaptability, reactivity, an understanding of interplay, narrative medicine practice, and the creative problem solving skills that are involved in all forms of verbal and nonverbal communication.

Not only has sculptural familiarity proved important in the case study with Bradley residents, but it can also impart vital spatial reasoning skills and engage observational skills and the importance of perspective when approaching any patient. Shapiro et al. (2006) explains that this form of creativity inclusion and “the questions it provokes - about doctor-patient relationships, physician identity, mortality and immortality, suffering and healing -are questions very much worth asking and ruminating on” (24). Standardizing the use of sculpture in the anatomy lab would not only help the spatial reasoning abilities of the future physicians but it will raise their awareness of the “doctor-patient relationship.” Sculpture also inherently has a place in adaptability training. A sculptor must learn to adapt an original conception of a project to what a particular material can achieve in the physical universe. A certain type of clay could be better than another, i.e. when creating a self standing sculpture of a certain height and structural integrity, porcelain and the feel and look desired in the sculpture might have to be sacrificed in order to use a stronger clay that can achieve sculptural height on its own merit. Engaging in a sculptural project is a constant conversation between the sculptor and the material because of physical requirements of the material. This conversation in the art realm is directly analogous to a medical interaction where a physician’s approach must be constantly adapted to a patient’s needs and thought processes regarding illness, medication, and pain tolerance.

Improvisational ability is important for a physician to be able to adapt to the patient in different circumstances and to different patients who respond differently to stimuli.
Improvisational ability will allow a physician to adapt to patients whether they come from a different background, speak a different language, or have a developmental disability. Kirmayer (1992) states that, “Accounts of illness meaning must recognize the interdependence of normative rigidity and metaphoric invention” (183). Each patient gives a different story of illness and responds to illness in a different way. Allowing for a breakdown in scripted interaction can only allow for better communication in which the patient can more genuinely tell a personal account. Practice in improvisation will benefit from the positivity needed in an improvised conversation with the principle of “yes, and.” Instead of alienating the patient with a negative reaction which can stop a conversation in its tracks, the physician can benefit from being forced to acknowledge the other person’s contribution to the conversation and build off of their interpretation. Improvisation training not only trains adaptation to changing circumstances and creative communication, it also trains the practitioner in patient affirmation instead of negation.

Not only does a student learn about clinical interaction from improvisational play, but can also learn from an exploration in playwriting. Playwriting forces writers to look critically at every interaction they partake in and observe. This critical observation training forces the practitioners to be aware of how they are interacting with patients and how to better approach that conversation. Heightened consciousness of these communication moments can reveal to the physician whether they should be using a different mode of speech or if they should instead use a creative form of explanation outside the verbal discussion. Makoul (2003) explains:

“Definitions of communication—and thus teaching, assessment, and research agendas—vary in their emphasis on the verbal, non-verbal, content, process, informational, relational, cognitive, and cultural aspects. Further, communication occurs at several levels, including intrapersonal (e.g. patients’ personal constructions of the illness experience), interpersonal, group, organizational, mass, and technological. And communication in medicine can be oral, written, or electronically mediated.” (79)
Thus with these different forms of communication, and different forms of learning, constant adaptation to different types of communication are necessary to provide each patient with the most informative interaction with the most effective communication. The last sentence of Makoul’s quote identifies only the oral, written, and electronic forms of mediation in communication, but he ignores a very important form that I have introduced and argued for throughout this paper: the creative mediation. Adding the creative into his list only works to strengthen his argument because the creative is the link between the verbal and non-verbal. Creative communication is taught through a physicians’ education, and physicians learn how to explain through their observations of teaching styles that worked for them and through the moments when they had to practice teaching others. By giving them more tools to access the different communication variations, they can be more successful in more instances of communication.

Music can also be extremely informative as it relates to improvisation and the medical practice. Haidet (2007) explains the intersection of jazz and physician-patient communication as explored in his article:

“This essay uses examples from jazz to illustrate principles of improvisation that relate to an individual communication act (ie, building space into one’s communication), a physician’s communicative style (ie, developing one’s voice), and the communicative process of the medical encounter (ie, achieving ensemble)” (164)

Jazz is a musical translation of a conversation, a communication between individual notes and between instruments. It is an experiment in rhythm between notes and the space that separates them. Each practitioner has a voice that is practiced into interactions with patients/other instruments. By understanding one’s own voice, each patient can be approached using that voice
but adapting it to fit the patient’s needs. The term Haidet uses “communicative process of the medical encounter” and also elucidates that the medical encounter is almost a dance. Each piece of the ensemble works together and dances around one another to achieve the most effective interaction that patients understand. The ensemble can be just the physician and patient, or it could involve family members and other medical professionals. Each person needs to be accounted for in this scenario for ideal communication. Also learned from any type of music is the idea of communication, and how it is important to find new ways of translation. Music can also help slow empathy erosion, vital to any physicians that want to be actively engaged with their patients. Encouraging a physician to approach conversation in a new light can reintroduce passion and interest into daily practice.

Creative writing as a reflective tool also helps engage a physician in every interaction. If at the end of the day physicians make sure to write the tender of each of the day’s interactions, they would then be forcing themselves to look at their communications and encounters with a critical eye. Kerr (2010) reveals that, “when teaching narrative competence is the goal, creative writing may produce the best outcomes” (295). Creative writing can give practitioners the ability to understand the medical narrative of their patients most effectively.

Creativity training then can give physicians the different languages with which to access the different patients that they might encounter, but can also give the physician the awareness and adaptability to use those different languages as they are appropriate to different situations. The incorporation of creativity into everyday interactions and into the approach to medicine will be more natural for a physician the earlier creativity training is stressed. If creativity training could be imbued into standard medical education or earlier in premedical education and
continued as professional training, the importance of tailored communication will be routine and not lost to the busy nature of a physician’s day.
Conclusion

Adequate medical communication has been a problem, and studies have now shown that this inadequacy leads to worse health outcomes. These outcomes could be a result of the inadvertent lack of compliance that comes from lack of understanding, while active engagement in conversation with the physician leads to better outcomes. Differences between the physician and the patient can feed into communication barriers that derive from the physician’s bias, even though a physician is expected to adopt the concept of universalism in her practice. These biases affect the healthcare delivered and received.

Autistic patients, as shown by the DSM IV definition, have impaired communicative ability. The correlation between communicative ability and quality of healthcare and subsequent quality of life make it an ethical imperative to seek a communicative bridge to this population. The bridge I propose and have tested through my project with the Center for Autism and Developmental Disorders at Bradley Hospital is art. Art has been used to communicate throughout history of peoples and of religion, and it is now time to take that nonverbal mode of communication into the physician’s exam room. My case study has shown that art can be used to communicate about health to an individual with a developmental disorder in a way that is understood. This mode of communication has been shown, in my study, to be effective in bridging the communication barrier and should be implemented in some form into physician-patient conversations. In addition, art mediators such as my breast cancer pamphlet, can be used to assist communication between physicians and patients, whether disabled or not.

These creative communication skills should be introduced to the physician during medical education as an alternative mode of conversation to access this population of patients.
Supplementing traditional medical education with an arts education will give the physicians the tools with which to bring creativity into the patients’ medical encounters, and therefore supply more effective communication to the patients in the modes that are best for them each individually. By giving physicians skills of creative communication and an education that will enforce critical attention to the medical interaction, art will return to all patients the respect, humanization, informed consent, and highest possible level of care that they should come to expect when visiting the doctor.
BIBLIOGRAPHY


MY DIAGNOSIS

My stage:

Systemic therapy recommendation:

Why is this right for me?

Notes:

QUESTIONS YOU MAY WANT TO ASK

- How long will my treatment last?
- How will treatment affect my normal activities?
- What are the risks and side effects that I should expect?
- How should I prepare for treatment?
- Are there any alternative treatment options?
- What type of follow-up will I need after treatment?
- What are the chances of relapse?
- Who can I talk to for a second opinion?

PERSONAL CARE PLAN

Healing is not limited to medical treatments. There are things you can do to feel better and to stay positive, and there are ways to advocate for yourself during the treatment process.

Some areas to consider in whole body-well-being are diet, exercise, time with family and friends, rest, and relaxation. Focus on what lifts your spirits. It is important to plan time for yourself as part of your care.

What makes me happy?

Supplies does not end after your course of care. Support groups, counselors, physical therapists, nutritionists, and social workers are available to you to assist in your healing process.

People I can contact:

People I can contact:

Notes:

- How long will my treatment last?
- How will treatment affect my normal activities?
- What are the risks and side effects that I should expect?
- How should I prepare for treatment?
- Are there any alternative treatment options?
- What type of follow-up will I need after treatment?
- What are the chances of relapse?
- Who can I talk to for a second opinion?

This guide was designed by Brown and RISD students Joanna Jacobs (Brown ’14), Mariah LaPierres (RISD ’13), and Alphon Wing (Brown/RISD ’13). We hope it facilitates communication between patients and physicians, and between different physicians, in order to create a unified care plan. Please give us any feedback at CarePointInitatives@gmail.com.

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