Introduction

Perception can be described as an active process in which the perceiver is actively interpreting his or her surrounding and thereby making subconscious perceptual choices (1, Fig. 1). Given this idea of active perception, it follows that doctors are actively interpreting what they hear and see during patient encounters. This raises the questions as to what informs these perceptual interpretations and whether bias plays a role in what the physician ultimately records in the patient chart. Bias, whether recognized or not, does exist among physicians and can in fact have a negative impact on clinical care. One study using clinical vignettes and conducted by Harvard (2) showed that implicit bias led physicians to under-prescribe thrombolytics to black patients with coronary artery disease (CAD). This result was in spite of a higher diagnosis of CAD made among black patients when compared to white counterparts. In order to understand and change the subconscious biases that affect one’s perceptual faculties, adults must self-reflect and in doing so identify their internal presuppositions and how they affect decision making (3). In order to better understand how my own perception is affected by subconscious interpretation and bias, I chose to create portraits of healthcare professionals at different levels of training. In doing so, I aimed to understand the way in which visual perception is affected by past experiences and how this ultimately affects the interpretation of what I saw. Ultimately, my goal was to understand how one’s perceptual processes affect one’s attempts of objectively representing others as it relates to the physician-patient relationship.

Methods

My method of self-reflection was based in portraiture. I have been painting for many years and every time I painted someone’s portrait, I noticed facial features of my subjects that had previously escaped me no matter how long I had known them. By seeking to create objectively faithful representations of subjects, I aimed to understand how my visual perception is affected by personal bias and how this ultimately affected my objectives in attempts to represent them.

I created three portraits of healthcare professionals in-training: Second-year, pre-clinical medical student (Fig. 2)

Second-year medical student, Acrylic on canvas, 18 in. by 24 in. In her, I saw the levy and joy of a first year who has yet to grapple with the stress of being in the clinical setting. I cropped the painting closely around her face to emphasize her laughter and thereby transmit her happy energy.

Fourth-year medical student (Fig. 3)

Fourth-year medical student, Acrylic on canvas, 24 in. by 24 in. In her, I saw my own internal struggle as I came to terms with my idealistic concept of medicine and the actual conflicts of interest that I encountered in the hospital. I chose to emphasize her piercing and serious stare directed at the viewer as well as the shadows around her in order to create dramatic depth.

Fig. 3. Fourth-year medical student, Acrylic on canvas, 24 in. by 24 in. In her, I saw my own internal struggle as I came to terms with my idealistic concept of medicine and the actual conflicts of interest that I encountered in the hospital. I chose to emphasize her piercing and serious stare directed at the viewer as well as the shadows around her in order to create dramatic depth.

Fig. 4. Internal Medicine Intern at Columbia NYP, Acrylic on canvas, 30 in. by 30 in. She represents the self-assured doctor I hope to become. Her stalwart and the large shadow she casts behind her emphasize the confidence and compusure that I saw in her as a newly-minted doctor who is ready to take on the challenges of medicine.

Fig. 4. Internal Medicine Intern at Columbia NYP, Acrylic on canvas, 30 in. by 30 in. She represents the self-assured doctor I hope to become. Her stalwart and the large shadow she casts behind her emphasize the confidence and compusure that I saw in her as a newly-minted doctor who is ready to take on the challenges of medicine.

Results

Through the process of painting, I came to understand visual perception as a purposeful activity in which one seeks key visual information to form an overall impression of the image being perceived (4). Furthermore, I learned that the visual patterns of each individual are influenced by past experiences, thereby subjecting the viewer to different ways of seeing the same image. In addition to my understanding of visual habits, I became aware of the design principles and codes that help the painter create a narrative for the viewer (5). Through design principles and artistic creativity, the painter can move beyond attempts of replication and truly capture the essence of the person using stylization and abstraction in portraiture (6).

My work in portraiture brought to my awareness many parallels between the visual arts and clinical medicine. Similar to how visual experiences teach one to see in a particular way, medical training teaches one how to conduct patient interviews with specific and directed questions for the sake of efficient data gathering (eq. Ranking pain 1 through 10, asking if pain radiates to the left arm). However, the habit of looking for information in highly-structured ways can lead even expert doctors to miss key information (7). Furthermore, as art has a set of principles and codes, medicine also has a specific language of syntax and codes (including axioms like PEERLA) that simplify communication into clear facts describing the patient. The abstraction that is permitted by artistic stylization is absent in medical documentation given the emphasis on objectivity and clarity (8). While the clarity of medical language is invaluable, I found that it lacked the ability to capture the dimensionality of the patient’s personality and instead described the patient within the confines of his or her illness.

Medical training offers a unique skill set that leads to efficient decision making in critical situations. However, there is a need to continue questioning the heuristics that drive medical decisions in order to evaluate personal biases that may affect medical treatment of patients. It is also important to recognize that the patient’s story extends outside of the realm of illness. In order to represent the patient more wholly, it is worth considering creating a space for physicians to document patient information that does not fit the structure of the typical medical note. In this way, communication among caretakers would be enhanced and could result in more nuanced and personalized healthcare delivery.

Discussion

References

1. Kandel ER. Observations is also invention: the brain is a creative machine. In: The Age of Light: the Quest to Understand the Unconscious In Art, Mind, and Brain. - from Vienna 1900 to the Present New York: Random House; 2013.