An Analysis of Medical Transculturation in Colonial North America

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(Revised)

Medicine in colonial North America was a mosaic of imported European tradition, diverse, regionally acquired knowledge, and reinterpretations of these foundations. Abundant myths persist regarding the collaborative relationships and interactions between European colonists and the Natives peoples of North America, including the tale of Tisquantum, or "Squanto", who introduced the colonists to staple North American crops and agricultural practices, allowing them to survive. In return, a colonial physician reportedly cured the Wampanoag chief, Massasoit, of a deathly illness in 1623. Highly overlooked in scholarly research until recent decades, however, is the impact of Native American and African slave medicine on the survival of European colonists in the New World: "'In the days of our sickness,' wrote Hector St. John de Crevecoeur in the eighteenth century, 'we shall have recourse to [the Indians'] medical knowledge, which is well calculated for the simple diseases to which they are subject'" (Vogel 5). Understanding how this information was originally transmitted between cultures is critical to facilitating justice for unrecognized contributions to our modern society, and informing our evolution in the era of globalization and technologization.

The catalyst for the national standardization, or more accurately, Westernization, of American medical practice was the New World's first medical school, which opened at the

College of Philadelphia in 1765, and still exists today as the University of Pennsylvania Perelman School of Medicine. However, due to the spatial and sociopolitical structure of North America, the process was slow and uneven. Before this, medical practice in North America took on nearly as many forms as the people who inhabited the region, even among European colonists. This diversity allowed for significant overlap in basic philosophy, and therefore greater openness to the sharing of cultural ideas, or transculturation. Most imported European knowledge was founded on principles of Greek medical philosophy, though, folk and religious traditions also found new air in the Americas. For example, Western science is often quick to criticize the spiritual and "irrational" elements of indigenous peoples' medical practices, but Christian Faith healing offers a prominent European parallel. The African slave trade also contributed to the importation and evolution of unique medical practices, including snake bite remedies and smallpox inoculation principles (Reiss 92).

Over 600 sovereign Native American tribes also existed in North America when the Europeans arrived, each with their own territories, cultures, and corresponding medical practices. However, they shared a common understanding of medicine as a holistic process that involved physical, spiritual, and even social elements encompassed by a general concept of balance. Most importantly, in sharp contrast to modern Western perceptions of medicine, Native American healing was much more than science. According to the journals of George Bird Grinnell, primarily in reference to the Plains tribes, "All these things which we speak of as medicine the Indian calls mysterious, and when he calls them mysterious this only means that they are beyond his power to account for…He whom we call a medicine man may be a doctor, a healer of diseases… or he is a mystery man" (Vogel 25). However, there was still an astonishing amount of empiricism in Native American medical practice, particularly in their usage of herbal

treatments. A 1924 publication by Heber W. Youngken in the *American Journal of Pharmacy* listed 450 herbal remedies used by various Native American tribes, many of which became staples of colonial medicine, and some of which are still utilized in modern medicine.

The primary force influencing early American transculturation was power. Power dynamics between colonists and tribes defined what, when, and how information was shared, and medical information represented one of the greatest sources of power. "In [colonial] New England, the Patuxet Indian Tisquantum (or Squanto, as he is often called) suggested that the Plymouth colonists (also called Pilgrims) were to blame for diseases that killed thousands of southern New England Algonquians; the colonists, he suggested, kept the disease in their storehouse for gunpowder. Recognizing Tisquanstum's ability to interpret, and by extension, control the causes of disease, the Wampanoags gave him gifts that showed their respect for his power" (Wisecup 16). As the European settlers established themselves in their new environment, Native Americans attempted to use their medical knowledge to gain favor and legitimacy with nearby colonies and fellow tribes. Some African slaves were also able to gain sympathy, even freedom, in exchange for valuable medical knowledge (Wisecup 17).

Aside from a basic need to understand their new environment, shared perceptions of the natural world as intrinsically linked to humans in both a physiological and divine sense allowed the colonists to assimilate Native medical knowledge in a semi-legitimate manner. In the sixteenth and seventeenth century, European philosophy held that human nature was directly dependent on the specific environment in which a person existed. The average factors of the European climate were believed to result in the most perfect human temperament and mental capacity, but by emigrating to the New World, colonists would be altered by the allegedly warmer and wetter conditions. Early colonists therefore accepted Native knowledge out of a

belief that they had become more physically like the Native people than their European counterparts, but still sought to legitimize themselves in the perceptions of European culture by rationalizing and othering Native culture whenever possible (Wisecup 18-29).

Evidence of this transculturation and the social pressures that shaped it can be found by extrapolating the rhetoric of primary sources on the subject. Disease, by nature, has consistent epidemiology, or history and progression. This lends itself to the archetypal description of disease through the format of a *narrative template*: "diagnostic storytelling that [physicians] perform in order to situate patients in a story trajectory with an imputed past and future… an activity at once cognitive and practical… shaped by what [physicians] can do for the patient, practically speaking, and by habitual [institutional] activity" (Davenport 873). Primary source descriptions employ narrative templates to describe diseases and treatments both familiar to European medicine as well as those newly encountered. However, many colonial narrative templates deviate from the standard format or rhetoric, such as including notes in margins, or alternative conclusions such as recipes. These deviations in their various forms are collectively known as texture (Whitehead 35).

Texture suggests a cognitive disturbance during the composition of the narrative template: "these lapses and incoherencies, their redundancies and paradoxes constitute moments when alternative interpretations and conclusions to narratives of encounter are possible; they consequently provide opportunities to consider multiple perspectives on and responses to colonial encounters" (Wisecup 11). Kelly Wisecup suggests that these cognitive disturbances are actually the result of instances of transculturation, where colonists were confronted with new knowledge that did not fit their traditional epidemiologic understanding. By deliberately omitting context, colonists were still able to record valuable information without losing credibility due to

social norms and pressures, which often prevented more explicit exposition. Unfortunately, due to these social pressures, the colonial narrative templates still do not tell us about the primary actors and processes through which transculturation occurred.

Specific colonial accounts of transculturation from Native Americans to European colonists typically appear as the general observations of a European actor, apparently over some period of time. For example, from the journal of Captain John Smith: “Sometimes they are troubled with dropsies, swelling, aches, and such like diseases; for cure whereof they build a stove in the form of a dovehouse with mats, so close that a few coals covered therein with a pot, will make the patient sweate extremely” (Vogel 37). The gender of the actors mentioned in colonial records are almost never explicitly specified, though the Europeans’ quickness to criticize the strangeness of Native customs would have likely compelled them to comment on any excessive involvement of women in Native society. An exception, however, might be made depending on the usefulness of the information, in which case the European observer might have omitted or obscured the context in order to legitimize the information within his own culture.

The lack of context in narrative texture allows more space for less socially acceptable processes or actors, including Native Americans, Africans, or potentially, women. Especially as relationships between Native American tribes and European colonies deteriorated, it is likely that women and other disadvantaged groups such as African slaves were more able to take advantage of the power conferred by medical knowledge. Women, whose social roles in both European and Native American culture excluded them from warfare and aggression, were likely better able to communicate, even across cultures. Cross-cultural marriage, for example, would have afforded women detailed observation of the other culture, which would be communicated informally, but likely more thoroughly to her native community if the opportunity arose.

In addition, the practices of gathering and manufacturing herbal remedies, which supplied the backbone of Native medical knowledge in colonial contexts, would have aligned more closely with the social roles of women among the European colonials. With the development of institutionalized Western medicine in North America beginning in the 18th century, women were increasingly excluded from the practice of medicine, sometimes to the severe detriment of their health; for example, the field of obstetrics and the practice of midwifery was severely marginalized when it became dominated by men after the mid-18th century, leading to unsafe practices and loss of traditional knowledge. This would have necessitated a certain degree of informal training and independent practice by women. Folk medicine and homeopathy would have been the most accessible form of knowledge, and would have been most directly influenced by Native American and African slave knowledge.

Understanding the transculturation of medicine in the Americas is important for several reasons. First, Native American pharmacopeias have contributed significantly to the science of modern medicine, and some drugs introduced to Europeans by Native people are still used today. The lack of acknowledgement, much less respect, given to these contributions is a travesty, compounded by the many injustices that Native people have experienced and continue to endure today. However, it is also in the interest of modern medicine to understand its roots and influences as the current medical industry becomes larger, more expensive, and less effective each year. Many modern physicians have suggested turning to other cultures for inspiration, and Native American medicine offers a particularly holistic philosophy in stark contrast to the brutally materialistic system of America today (Randall).

The most directly necessary application of understanding early American transculturation, however, is to understand how that process might continue in an increasingly

globalized and unequal world, with the emergence of new infectious diseases such as AIDS, the Ebola virus, or the Zika virus. Culture affects perception, which in turn affects people's responses to a crisis: "Native theories that supernatural entities, sometimes called thunder-beings, shot diseases into people and linguistic connections between the Algonquian words for shooting a gun and shooting thunderbolts show how the Roanoke employed pre-existing medical knowledge to attribute their illness to the colonists' military technology" (Wisecup 33). Understanding how different cultures perceive and interact in the context of infectious disease and power dynamics will be critical to effective responses to disease outbreaks of the future, which will have global effects rather than regional ones. In the modern era, outbreaks of Ebola throughout central Africa have been exacerbated by unique cultural and sociopolitical facets as well: "perceived barriers to an Ebola-free environment included denial of Ebola's continued and prolonged existence; belief that sexual transmission of Ebola by survivors was occurring; continuation of prohibited cultural practices such as secret burials and traditional healings; and large migration flows through porous borders between Kambia and Guinea. 'The barriers that still prevail among the community people are stubbornness and the ego to follow tradition'" (Nurridin et al.)

The increased prevalence of literature regarding the early cultural interactions between Native Americans and Europeans is heartening. The complexity of the Native American and European immigrant cultures of the Early Americas will provide an invaluable case study for the increasingly diverse, globalized environment of the modern world. Understanding and crediting the contributions of Native peoples to American history is critical to precipitating desperately needed social justice in modern society. It can also prevent similar future injustices as technological development and globalization present unprecedented opportunities for

communication and transportation, as well as exploitation and acculturation. Diversity leads to resiliency, and maintaining culture while exchanging knowledge is the key to evolving societies.

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