Avery LaJeunesse March 20, 2023

ENGW 3307 – Dr. Metzger Project 3 Draft 1

Documentation: Word Count:

Hi! for peer review, I have not added hyperlinks yet, so I am for now underlining the word/phrase that I plan to link and adding the source next to it.

How can I create a balanced argument for my project?

Where should I be specific and where should I be more general?

How effective would a multi-media article be? Podcast / interview included?

Genre: Combination of Feature with Explainer – mostly feature

Topic: Alternative medicinal practices are consistently written off despite their belonging to valid medicinal systems. Ethnomedicine is all medicine, science is social - the rejection of alternative medicine reveals ingrained bias.

Where would I see this? The New Yorker, NY Times, Scientific American

Model Text:

https://www-scientificamerican-com.ezproxy.neu.edu/article/turning-plants-into-drug-factories/

Publications / Sources:

Covid effectiveness

https://news.cgtn.com/news/2023-03-24/Traditional-Chinese-medicine-gains-popularity-after-COVID-19-wave-1igKHRhuDFS/index.html

TCM used with flu

https://www.reuters.com/breakingviews/sinopharms-second-chinese-herb-shot-is-potent -2022-12-08/

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https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7439087/

NRICM101

https://www.sciencedirect.com/science/article/pii/S0753332220312294?via%3Dihub

Attitudes towards Alternative medicine

https://jamanetwork.com/journals/jama/fullarticle/187543

Herbal medicine research and global health: an ethical analysis

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2649468/

A gap between acceptance and knowledge of herbal remedies by physicians: The need for educational intervention

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1310610/

The Safety of Herbal Medicine: From Prejudice to Evidence https://www.hindawi.com/journals/ecam/2015/316706/

Why are doctors so against alternative medicine?

 $\frac{https://www.irishtimes.com/news/health/why-are-doctors-so-against-alternative-medicine-1.188177}{ne-1.188177}$

Not sure ab this one....

https://www.cancervic.org.au/cancer-information/treatments/common-side-effects/complementary-therapies/herbs-plants.html

Counterargument:

https://www.statnews.com/2017/08/29/cancer-treatment-alternative-medicine/

More publication-y (2007)

DRAFT 2

Non-western medical systems are widely discredited as incomplete, invalid, and ineffective despite their continued use in modern contexts for the treatment of serious disease. During the height of the COVID-19 pandemic in China, practitioners of Traditional Chinese Medicine (TCM) were consulted to treat patients whose illness did not respond to standard intervention. Remarkably, patients on ventilators and others in severe condition improved after swapping anti-viral drug treatment for remediation with traditional therapies.

- Decoction and acupuncture.
- Western medicine is only symptomatic treatment



https://www.chinadaily.com.cn/a/202301/10/WS63bcfc4da31057c47eba8bca.html



https://www.theguardian.com/world/2020/jun/03/beijing-draws-up-plans-to-outlaw-criticism-of-traditional-chinese-medicine

Ethnomedicine describes a culture's knowledge and perception of health, illness, and treatment. Societal values and beliefs play a major role in the construction of medical systems. The most widely propagated medical system is Biomedicine, a system that emphasizes strict scientific basis with therapeutics validated by extensive clinical trials. The biomedical system is inextricably tied to Western culture and values, eliminating the corporeal fluidity and spirituality found in other practices by establishing firm distinctions between mind, body, and the body's components as separate entities. These differentiations serve their purpose in developing targeted therapies but have striking effects on the patient experience. Individuals suffering from major disease have begun to explore alternative medicine. Reports(jamannetwork) indicate that taking more holistic approaches to treatment benefits mental health and helps patients acknowledge illness from a less combative standpoint.

During the COVID-19 pandemic, traditional Chinese medical practicioners were brought in to at-capacity hospitals to help treat patients on ventilators that were not responding to other forms of remediation. A significant number of patients improved with the integration of ancient methods like herbal formulation and acupuncture. As a result, Traditional Chinese

Medicine (TCM) as a whole has gained increasing popularity, with a healthy dose of skepticism along the way.

Negative assumptions about alternative medical systems are tied to implicit bias. From an anthropological standpoint, all medicine is ethnomedicine(insert focault hyperlink). Evidence from multiple routes of treatment in TCM, ayurvedic medicine, and mayan curanderos (to name a few) indicates speedy and effective recovery from major diseases like pneumonia and bacterial infection. The effectiveness of TCM in treating cancer has gained significant attention.

In TCM, Herbal remedies are assembled on a patient-by-patient basis, each with unique formulations created according to reported symptoms. Aside from supplementation, a practitioner will recommend behavioral, dietary, and/or environmental changes after building a comprehensive and personal understanding of their patient's overall health.

The alkaloid lycorine is a chemical derived from plants found in many different species of Amaryllis throughout most of southeast Asia and the Hindu Kush Himalayan region. Lycorine-containing plants are used in Traditional Chinese Medicine for detoxification and the treatment of lung and skin disease, as well as removing heat (Sancha et al., 2022). The petals, leaves, and roots of these plants can be brewed into teas along with other herbs with elemental properties to balance the subsequent release of heat.

Different ethnomedical systems each contain unique understandings and dimensions of the human body. When comparing Traditional Chinese Medicine (TCM) and biomedicine, striking differences can be observed. TCM uses the terms *shen* 身 (the lived body), hsing 形 (the bodily form or shape) and ti 体 (embodiment of any number of things, including spiritual, cosmic, and moral states) in combination to illustrate a multifarious existence free from the mechanical physiology and discrete anatomical structures that define the western idea of 'body' (Scheid:2002:28). The biomedical system, inextricably tied to Western culture and values, eliminates this corporeal fluidity by establishing firm distinctions between mind, body, and the body's components. The contrast in each system's definition of the body consequently projects conflicting understandings of health and illness.

In the corporeally minded biomedical system, the identification of "a condition," is bound exclusively by changes "in a person's physical state" (David:2015:23). These changes or symptoms are validified through biological, "materialist indicators, such as blood pressure," which hold supreme authority over the patient's determined status as either healthy or unhealthy (Gordon:1988:23). This approach often fails to consider the value of the patient's anecdotal evidence because it solely focuses on objective data. Diagnosis, which serves as the supposed answer to a patient's medical questions is the key factor to legitimize a patient's illness (David:2015:26). Without a proper diagnosis, a patient is practically disqualified from receiving treatment even if they continue to experience symptoms. From a biomedical perspective, a patient is 'healthy' until proven 'unhealthy'.

In TCM, health can be broadly defined as balance among the five phases – a system of correspondences between wood, fire, earth, metal, and water, and their assigned seasons, tastes, colors, organ systems, etc. For example, excess of fire is attributed to fever, which is soothed with heat-draining drugs (bitter, fire), and balanced with cooling, fluid-replenishing drugs (sweet, earth) for symmetrical treatment (Farquhar:1994:480). The entity that governs this balance and the "basis of all agency in Chinese medicine" is *Qi*, which embodies and the distribution and flow of energy throughout the body (Scheid:2002:48).

As illustrated, TCM takes a vastly different approach is understanding health. There is no obsession to achieve "a one-to-one correspondence between patient narratives" and diagnosis because health and illness are complementary entities that exist in a yin/yang-balance (Farquhar:1994:478 & Gordon:1988:25). Perhaps the most significant difference between biomedicine and TCM is that patients maintain authority on the severity of their condition and status as 'unhealthy' because their descriptions are vital to the development of specific, personalized treatment. Even if 'negative' results for "blood and urine chemistries, X rays, and sonograms" are observed in TCM practice, "the patient can name the symptoms...and the doctor can design an intervention" (Farquhar:1994:478).

I DON'T HAVE A CONCLUSION YET

Considering how widespread these plants are and their relatively simple growth environments

- i. Introduction to attitudes towards alternative medicine
 - a. Background on a few alternative medical systems ultimately going to focus on TCM
 - i. State definition of Ethnomedicine
 - b. Everyday supplementation
 - c. Treatment of Serious diseases like cancer
- ii. Biomedicine Introduction to treatment of serious diseases via chemotherapy
 - a. Failures of chemotherapy
 - b. Doxorubicin
- iii. TCM
 - a. Overview of traditional Chinese medicine
 - i. Holistic approach to wellbeing

Herbal remedies are assembled on a patient-by-patient basis, each with unique formulations created according to reported symptoms. Aside from supplementation, a practitioner will recommend behavioral, dietary, and/or environmental changes after building a comprehensive and personal understanding of their patient's overall health.

b. Alkaloid example

The alkaloid lycorine is a chemical derived from plants found in many different species of Amaryllis throughout most of southeast Asia and the Hindu Kush Himalayan region. Lycorine-containing plants are used in Traditional Chinese Medicine for detoxification and the treatment of lung and skin disease, as well as removing heat (Sancha et al., 2022). The petals, leaves, and roots of these plants can be brewed into teas along with other herbs with elemental properties to balance the subsequent release of heat.

NOTES for TCM: abridged from Med Anth Class

Pattern:

- The interior is always manifested on the exterior
- Reading the surfaces of the body
- Identifies a relationship that unites a set of symptoms together into a particular constellation

Versus Disease:

- Pattern: a relationship, a process in the body
- Disease: a spatialization and localization in the body

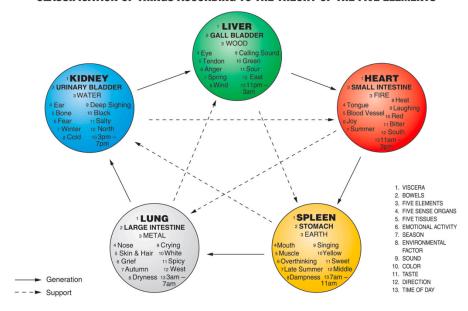
Clinical encounter in Chinese medicine - "pattern recognition and treatment determination"

Polypharmacy - Formulas

• Almost all herbal medicine treatments rely on a formulation

Five phases: cycles of production and conquest Wood, Fire, Earth, Metal, Water Within these, there is a system of correspondences

CLASSIFICATION OF THINGS ACCORDING TO THE THEORY OF THE FIVE ELEMENTS



https://www.tcmworld.org/what-is-tcm/five-elements/

iv. Alkaloids with cancer cells

a. Alkaloids are a novel targeted chemotherapeutic approach being used to treat drug-resistant breast cancer. Studies focusing on cytotoxicity in MCF-7 cells, which serve as a standardized model for breast cancer, have shown significant results. Even in a resolutely biomedical approach, these remedies maintain their efficacy.

v. Biomedicine

References

Sancha, S. A. R., Gomes, A. V., Loureiro, J. B., Saraiva, L. & Ferreira, M. J. U. Amaryllidaceae-Type Alkaloids from Pancratium maritimum: Apoptosis-Inducing Effect and Cell Cycle Arrest on Triple-Negative Breast Cancer Cells. *Molecules* **27** (2022). https://doi.org:10.3390/molecules27185759

Comments from Discussion:

- Multimedia could be very useful for understanding (such as diagrams)
- Introducing too much might be overwhelming for the reader, perhaps include less science and focus a bit more on the social aspects for digestibility

- Looking into TCM way of treating scoliosis a good comparison
- I think that including an interview at the end as a kind of "if this was interesting to you here's more content on it" type thing would be very interesting and useful to the reader
 - Finding more citations for TCM information would be a good idea readers want to know where your info is from (can ask professor for lecture sources maybe)

Audience // Publication Analysis

Submission requirements for FEATURE articles:

- "We strive to publish stories that use rigorous science and clear thinking to cut through hype, Pollyannaism, and doomsaying"
- "We avoid jargon, but we tend to go deeper into processes and mechanisms of action than most general-interest magazines. Our features usually run from 2,000 to 4,000 words, and they are written and edited for curious general readers who love untangling big ideas and want smart context for what's going on in the world. "

Word count: 1,134 Words, under standard for feature articles

- Mentor text does not have too much jargon but goes into outlining the science behind cyclotides
- Not forcibly pushing the technology / inserting an opinion is revealing the positive implications and future directions without excessive excitement / benevolence
- The article describes something novel and is constructed in a way that develops interest throughout the text citing examples of where phytomedicine has been used historically and how we can transfer this to use in developed pharmacological settings.
- I can better appeal to the audience by slowly getting more specific after establishing scientific concepts throughout.

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