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### **The Implications of the Biomedical Model on Indigenous Health**

Since the first time I heard Donald Trump's campaign slogan, "Make America Great Again", the question of what makes a "great" country, has resonated with me. In my opinion, a "great" country would treat all citizens as equals, regardless of their ethnicity. However, this has not been historically demonstrated in the United States where slavery and colonization has taken place and in Canada where colonization has taken place.

In America, African-Americans were not freed from slavery until 1865. Even after slavery was abolished, segregation laws kept white people and "coloured" people from using the same facilities and entrances to buildings. Segregation did not officially end until 1964.

In Canada, Indigenous peoples were forced off their lands by treaty agreements (1). Foreign plants and animals carried pathogens and diseases that were previously unknown to Indigenous peoples that decimated their populations (1). Canadian Residential Schools operated from the 1870's to the 1990's with the goal to "civilize" the children of Indigenous peoples (2). As a result, children were forcibly taken away from their parents and brought to schools where they were stripped of their traditional clothes, separated from their siblings, and told they could no longer speak their native languages (3). Children in residential schools were physically, sexually, psychologically, and spiritually abused (1). A lack of funding from the government meant that many children did not receive adequate nutrients in their diets causing them to become malnourished (4). Research that was conducted during the 1940's, exploited the children who were malnourished by viewing them as "experimental bodies" which could be used in various inhumane experiments to test what the results of malnourishment and proper nourishment were (4).

At the beginning of our course, we discussed the biomedical model which largely influences Western medicine (5). *Stedman's Medical Dictionary* (2006) defined the biomedical model as “a conceptual model of illness that excludes psychological and social factors in attempt to understand a person's medical illness or disorder”.

In Johnson's APA Presidential Address, she describes the course of disease represented by the biomedical model as follows (5). The body gets exposed to a pathogen, which initiates the onset of the disease. The preclinical phase is when the symptoms have yet to emerge. Once symptoms have emerged, the person may seek medical help. Medical professionals will make a diagnosis based off the most likely biological cause of the disease. Once the diagnosis is made then treatment can begin. If treatment is successful then the patient is cured. If not, the patient could get worse or die. In the biomedical model there is a feedback loop which is used when a therapy proves ineffective (5). In this case new tests are run to determine the correct cause of the symptoms and recommend an accurate treatment (5).

In Johnson's address, she describes the biomedical model as reductionistic, exclusionary, and dualistic (5). She feels it is reductionistic and exclusionary due to the lack of consideration for causes of disease that are not biological in nature (5). And dualistic as a result of separating the mind and body from causes of disease and illness (5). A preferred model of looking at illness and disease should incorporate a more holistic lens (5).

While the biomedical model did well in addressing the infectious diseases, it has been less successful when considering chronic diseases (5). An example of a chronic disease is diabetes, where the body cannot produce insulin or cannot use the insulin within the body (6).

Throughout our course and the Interdisciplinary Dialogue students have been made aware of the poorer health outcomes among Indigenous populations in Canada, specifically in regards

to chronic diseases. It was not until the 1950's, when diabetes started to become prevalent among the Indigenous populations and would eventually reach epidemic rates (7). In Canada, approximately 8 in 10 Indigenous young adults will develop Type 2 diabetes, as compared to 5 in 10 non-indigenous young adults (8).

A Mohawk community in Quebec, Kahnawake, specifically has alarming rates of Type 2 diabetes (9). 10% of individuals who are between the ages of 45 to 64 have Type 2 diabetes, which is double the rate compared to the general population (9).

The high rates of diabetes among Indigenous Canadians is not a result of a biological predisposition. The biomedical model does not take into account the social, emotional, spiritual, physical, and psychological trauma that the Indigenous peoples of Canada have been faced with. Some traumas that Indigenous peoples have incurred are: colonization, oppression, assimilation, and cultural genocide.

The biomedical model does not allow us to look at these high rates of diabetes among the Indigenous populations in Canada for what they are: a legacy of colonization.

## References

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