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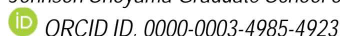
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HEALTH INEQUALITIES AND SOCIAL DETERMINANTS OF INDIGENOUS PEOPLES' HEALTH IN AUSTRALIA, CANADA, AND THE UNITED STATES: CAUSES AND POLICIES OPTIONS

Abstract. *The author of the paper investigates the issue of Indigenous health inequalities. The main purpose of the research is to assess the causes of health inequalities among Indigenous people and policy options to reduce the health gaps. Systematization of the literary sources shows that there are health disparities between Indigenous people and non-Indigenous people and approaches for solving the problem come in different forms. The methodological basis of this study is a comparative analysis that used secondary data to capture health inequalities among the Indigenous populations in Australia, Canada, and the United States. These countries have adopted different policy options to reduce these inequalities. The paper presents the results of a comparative analysis that contributes to knowledge by articulating what is not known about Indigenous health inequalities and social determinants of health and policy response. The study contributes to understanding by articulating what is not known about Indigenous health inequalities and social determinants of health and policy response. Aside from the study being useful to policymakers, politicians, development experts and the academic environments, the study provides the opportunity to assess some of the policy interventions. When necessary, it provides ample opportunity if there is a need to reform the social and health policies meant to reduce health inequalities among Indigenous populations. The author found that both grey and academic studies have examined policy options and governance meant to reduce health inequalities among Indigenous people in Australia, Canada, and the U.S. However, there is a lack of quality studies that have evaluated these policy options, limiting the strength to determine achievement associated with such policy options and governance. Further, there is limited information on whether these policy options are suitable for the Indigenous population to enhance their health status. With these limitations, future studies need to assess the effectiveness of these policy options and determine if the policy options are culturally suitable to reduce Indigenous people's health inequalities.*
Keywords: health inequalities, Indigenous people, policy, social determinants of health

Introduction. Health inequalities by socioeconomic status dominate even in the most developed and democratic welfare states (Berlin Social Science Center, n.d.). Public Health Scotland defines health inequalities as the inequitable and unnecessary disparities in individuals' health across the population and between different population groups (Public Health Scotland, 2019). The World Health Organization (WHO) conceptualizes health inequalities as the systematic discrepancies in the health status of various population groups (WHO, 2018).

There is substantial evidence that socioeconomic factors such as education, income level, employment status, ethnicity, and gender have a direct influence on the overall health status of an individual (WHO, 2018). Health inequalities are not peculiar to a particular region, country, or continent. In all parts of the world, be it low, middle, or high-income countries, there are massive gaps in the health status of different social groups (WHO, 2018). Evidence has shown that the lower the people's socioeconomic positions, the higher their vulnerability to health challenges (WHO, 2018).

Health inequalities go against the ethics of social justice, especially since they are avoidable (Public Health Scotland, 2019). They do not happen by chance, or randomly, but they are caused by socially determined circumstances that are mostly beyond one's control (Public Health Scotland, 2019). These

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circumstances denied people their opportunity to live longer and have healthier lives (Public Health Scotland, 2019). Furthermore, health inequalities are disparities in health status or the distribution of health resources between different population groups, resulting from the social conditions in which individuals «are born, grow, live, work, and age» (WHO, 2018).

These health inequalities are of immense concern from a public health context as well as from a fundamental human rights context (IASG, 2014). Everyone, irrespective of socioeconomic status, has the right to the most excellent standard of physical and mental health. As such, states must improve, protect, and fulfil all human rights (IASG, 2014). Despite a collection of universal accomplishments in the improvement of population health, one leading indicator of the impact of inequalities in health status globally, is the persistence of obviously low health status of indigenous populations of their lands and their countries, «whether we look across the globe as a whole or within the wealthiest of nations» (Pulver et al., 2010).

The United Nations (UN) declared that there are around 370 million indigenous people in the world presently living in almost 70 countries. An approximate 7 million of these live within the advanced economies of Australia, Canada, and the United States (Pulver et al., 2010). Each of these countries has a colonial past that is closely tied to the British empire. Despite the wide disparity in time and place, familiar narratives of the colonization event and its indelible impact on the health status and challenges encountered presently in aiming for recovery come up as a «shared agenda of unfinished business» (Pulver et al., 2010).

Extreme health and social inequalities persevere between Indigenous and non-indigenous people of all three countries (Pulver et al., 2010). These persisting gaps in health issues are a matter of significant concern despite governance and strategies to bridge these variances (Ring and Brown, 2003).

To document the socioeconomic challenges facing Indigenous people, numerous studies have been conducted on Indigenous health research, particularly health gaps and policy response to these gaps. Still, there persists a lack of knowledge regarding the social and contextual factors influencing equitable access to healthcare services; particularly when analyzed from the angle of Indigenous populations (Cameron et al., 2014). This subjective data is missing, insufficiently represented, and underestimated in the scientific literature (Cameron et al., 2014). This paper is not interested in filling in the missing gaps. Rather it focuses on examining the causes of Indigenous health gaps, the health disparities between the Indigenous population and non-Indigenous population and the policy options formulated to address Indigenous health inequalities.

Literature review. Health inequalities between Indigenous and non-Indigenous populations. Globally, health inequalities and inadequate care and treatment of vulnerable populations continue to be a bone of contention amongst healthcare stakeholders (Boutain, 2005). Simultaneously, these health inequalities between Indigenous and non-Indigenous people are widespread and prevalent (Anderson et al., 2006, 2016; Gracey and King, 2009; King et al., 2009). Also, they are widely perceived as unjust, avoidable, and remediable (Jones, 2010; Whitehead, 1991). These inequalities occur because of some social factors that hinder the right to healthcare services (Reid and Robson, 2007; Rights et al., 2007).

Indigenous people, as a population, do not have the same level of health as non-Indigenous people (Canada Health, 2003). Several studies have documented the level of health disparities between the former and the latter groups. Despite the diversity and endowment of languages, culture, traditions, and classical trajectories of Indigenous populations; they are regarded as «vulnerable population» because of their susceptibility to health-related outcomes and events (Mejia et al., 2010).

To show Indigenous people's susceptibility to health-related outcomes, Meija and colleagues used a qualitative review to examine oral health inequalities among Indigenous populations and non-Indigenous populations in Australia, Canada, and the United States (Mejia et al., 2010). The findings of the study show that Indigenous Australians had higher percentages of edentulism (loss of all teeth). Higher rates of

recorded toothache; a lower mean estimate of dental visits; are more likely to visit for a complication instead of a check-up; and receive a smaller mean figure of dental fillings when compared to their non-Indigenous counterparts (Mejia et al., 2010). Similarly, a recent survey of adult oral health indicated a 2.3-fold disparity in the prevalence of non-treated coronal decay between Indigenous and non-Indigenous Australians (Roberts-Thomson et al., 2007). Also, national data show that despite the overall enhancement in children's oral health and declining levels of dental caries from 1977 to 1993 (Davies et al., 1997b), caries level among Indigenous children have jumped up (Cooper et al., 1987; Davies et al., 1997a).

The health disparity between Indigenous and non-Indigenous Australians is best explained by variations in life expectancy (Australian Institute of Health and Welfare, 2014). For example, in the female Indigenous population, life expectancy in 2010-2012 was 73.7 years in contrast to 83.1 years for non-Indigenous females, a difference of 9.5 years. For Indigenous males and non-Indigenous males, it is 69.1 for the former and 79.7 for the latter, a difference of 10.6 years. Indigenous babies are not excluded from these health gaps, as babies born to Indigenous families are more likely to be malnourished than babies born to non-Indigenous families (Australian Institute of Health and Welfare, 2014). Also, Children in Indigenous households die at a rate that is twice that of their non-Indigenous counterparts. From 2007 to 2012, 212 of every 100,000 Indigenous children aged 0-4 died compared with 95 out of every 100,000 non-Indigenous children (Australian Institute of Health and Welfare, 2014). Indigenous Australians and non-Indigenous Australians when compared, the former is most likely to have specific types of health conditions and, for several conditions, encounter earlier onset (Australian Institute of Health and Welfare, 2015). Additionally, they have a sustained high incidence of specific diseases that are now basically not reported in the latter group, like trachoma and acute rheumatic fever (Australian Institute of Health and Welfare, 2015).

Indigenous people vary in levels, patterns, and trends of health (Ring and Brown, 2003). What is similar is the substantial unsatisfactory disparities between the health of indigenous and non-indigenous populations in advanced nations (Ring and Brown, 2003). For instance, in Canada, going by the U.S. News & World Report, the advanced health system has placed the country in the first position in the world for quality of life for four consecutive years (Rammohan, 2019). Despite the cutting-edge health innovations in healthcare delivery services in Canada, health inequalities between Indigenous and non-Indigenous populations persist (Fridkin, 2012; McKennitt, 2018; Rammohan, 2019; Raphael, 2009). Health inequalities among Indigenous populations are manifested by gaps in nationwide health indicators, with Indigenous people continually experiencing worse health outcomes compared to non-Indigenous populations in Canada (Fridkin, 2012). Worse health outcomes faced by Indigenous populations in Canada include mental health, hypertension, diabetes, arthritis, HIV/AIDS, obesity, and tuberculosis (Fridkin, 2012; Rammohan, 2019; Richmond and Cook, 2016). Health inequalities are also exhibited by Indigenous populations' unequal access to social determinants such as employment and income, education, housing, healthcare, and food security (Reading and Wien, 2009).

Significant health inequalities exist between Indigenous and non-Indigenous Canadians (NCCAH, 2013; Rammohan, 2019). Evidence of this was documented in several studies. According to Kim, Indigenous Canadians suffer from unequal rises in hypertension, diabetes, mental health issues, and «overall morbidity and mortality» compared to non-Indigenous Canadians (Kim, 2019). Consequently, citing various studies, Greenwood and de Leeuw claim that compared to Canadian children, Indigenous children experience poorer health, suffer higher rates of infant mortality, youth suicide, middle ear infections, and tuberculosis. They also state that Indigenous children suffer from injuries and deaths, dental caries, obesity, and diabetes, and increased vulnerability to environmental pollutants such as cigarette smoke more than their non-Indigenous counterparts. Besides, the Greenwood and de Leeuw's study affirms that the immunization rates for Indigenous children are lower than those of non-Indigenous children (Greenwood and de Leeuw, 2012).

Just like Canada and Australia, the United States also has some Indigenous populations that are experiencing poor health when compared to the non-Indigenous population (Jones et al., 2018). Unlike the term Indigenous/Aboriginal people used in Canada and Australia, in the United States, the Indigenous populations are referred to as the Native Americans (Rutherford, 2017).

In terms of health inequalities between the Indigenous populations and non-indigenous populations in the United States, Jones and colleagues reported that low diet had a ripple effect all over the entire indigenous community, «from type 2 diabetes to obesity and cardiovascular disease» (Jones et al., 2018). For instance, the widespread impact of diabetes among the Indigenous population is 16%, which is higher than any other racial groups such as the Black population (13%), Hispanics (13%), Asian American (9%), and the white people (8%) (CDC, 2018). The Indigenous people have a more significant widespread of diabetes associated with mortality (34.1%) in contrast to non-Hispanic whites (18.6%). The pervasiveness of obesity among the Indigenous population is (43.7%), which is considerably higher than (28%.5) of non-Hispanic whites. Also, the Indigenous people have a higher pervasiveness of cardiovascular diseases more than the United States general population (Jones et al., 2018).

The Indigenous people in the United States, also referred to as the American Indian and the Alaskan Native (Sequist et al., 2011), also experience oral health inequalities than the non-Indigenous populations. For instance, the Indian Health Services carried out oral health surveys in 1983-1984, 1991, and 1999 (Mejia et al., 2010). Data from the 1999 survey proved that 68% of Indigenous children aged 2-5 years had untreated tooth decay, three-time more than children in the U.S. general population as illustrated by the National Health and Nutritional Examination Survey (Mejia et al., 2010). Also, the 1999 survey showed that among 6 to 12 years old, had untreated tooth decay in both the primary and permanent dentition varied between 60-75%. For the permanent dentition, 46% of Indigenous American children had untreated decay in contrast to 11% of non-Indigenous American children in the Third National Health and Nutrition Examination Survey (Mejia et al., 2010). For Indigenous adults, the 1999 survey revealed that 68% of 35-44 years old had untreated root decay. Still on the same data, among other people, 61.35% (55 years and above) had untreated root decay (Mejia et al., 2010).

Methodology and research methods. This study investigates the causes of health inequalities among Indigenous, and it adopts a comparative case study. Goodrick (2014) conceptualizes case study methodology as an in-depth investigation, usually undertaken over time, of a single case such as policy intervention. This methodology, according to (Yin, 2003), is essential when the research investigator feels the context to be incredibly pertinent to the subject under investigation. Thus, the justification for my preferring such an approach that supported for «cross-national comparative» (Goerres et al., 2019) study between health inequalities among Ingenious and non-Indigenous populations in Australia, Canada, and the U.S.

Australia, Canada, and the U.S. are advanced countries with comprehensive health policies and harbour a lot of Indigenous populations with health inequalities. I analyzed and synthesized similarities, differences, and patterns across the three countries that share a similar goal to reduce health inequality among Indigenous people. According to Collier, «a central and legitimate goal of comparative analysis is assessing rival explanation» (Collier, 1993).

A comparative case study is useful when it is not feasible to conduct randomized control trials or quasi-experimental design (Goodrick, 2014). However, the comparative case studies are not free from criticism (Goerres et al., 2019). One possible weakness is that they are incredibly capital-intensive, especially if extensive fieldwork is involved (Goodrick, 2014). To overcome this challenge, I used high-quality studies that passed a systematic screening to synthesize health gaps and social determinates of health among Indigenous people.

Data Collection. The author employed systematic review to include some of the studies used in the paper. Systematic reviews are used to «identify, evaluate, and summarise the findings of all relevant

individual studies over a health-related issue, thereby making the available evidence more accessible to decision-makers» (Ganeshkumar and Gopalakrishnan, 2013). This process allows researchers to formulate a defined question that the review will answer. For instance, researchers can frame this research question, what are the perceptions of non-Indigenous people on health inequalities in Indigenous communities?

Researchers can use multiple online databases to search for relevant studies from both peer-reviewed and grey literature on the research topic. The selected studies from these databases must go through a rigorous process to reduce bias. Using evidence from systematic review to inform healthcare decisions can decrease variations in healthcare delivery and provide best practice (Ganeshkumar and Gopalakrishnan, 2013). Also, a systematic review offers accessible needed information to researchers, healthcare providers and policymaker because it uses a rigorous process which reduces bias (Ganeshkumar & Gopalakrishnan, 2013). Although systematic reviews employ precise and straightforward mechanisms of evaluating literature, they involve access to a broad range of electronic databases which might be costly for some researchers, especially those from developing countries (Mallett et al., 2012).

Policy review. According to Kennett (2001), cross-national social policy comparisons demand a first-time knowledge of what transpires within each state before assessing «functionality equivalent» and employing «theoretically informed analysis» to compare more than one country. Taking this into consideration, I seek to understand the policy options and other governance approaches meant to tackle Indigenous social determinants of health in the three countries under investigation.

To this end, the author reviewed these policy documents with emphasis on the objectives, targets, policy architecture and the structure of approaches used to address inequalities in Indigenous people's health. Using policy review as a way of collecting data is less expensive, and it provides a reliable source of background information However, information on policy documents can be outdated, and time to review a lot of policy document might be time-consuming (CDC, 2018).

Data synthesis. This process (meta-analysis) represents a unique subset of systematic reviews (Northcentral University Library, 2020). However due to the nature of the studies included in this study, it was not feasible to use meta-analysis to statistically combine data from the included studies. For this reason, to synthesize the results of the included studies, I used a narrative synthesis for summarising their main findings, and I presented the results in text.

Results. Indigenous health: the underlying causes of the health gap. There are factors responsible for the underlying causes of the health inequalities among indigenous populations. Social determinants of health (SDH) are the non-medical causes that determine health outcomes (WHO, 2020). They are the situation in which people «are born, grow, live, work, and age» (WHO, 2018), and the more extensive set of forces and structures shaping the circumstances of day-to-day life (WHO, 2020). Various studies have been conducted in identifying the underlying causes of the health gap between indigenous and non-Indigenous populations.

In Australia, Markwick and colleagues used data from the 2008 Victorian Population Health Survey, a telephone interview survey of 34,168 randomly selected adults. The data included the measurement of the following: SDH, healthcare utilization, lifestyle risk factors, and health outcomes (Markwick et al., 2014). The findings from the study that used a generalized linear model show that determinants were statistically significant between Indigenous and non-Indigenous Australians in the areas of psychological risk factors, low socioeconomic status, low social capital, and prevalence of lifestyle risk factors. That is, Indigenous Australians were more associated with poverty, food insecurity, obesity, and the lack of family support. One major limitation of this study, according to Markwick and colleagues is that the data used to assess inequalities in social determinants of health was not meant to examine the health of Indigenous people (Markwick et al., 2014).

Furthermore, Indigenous populations in Australia experience social and economic disadvantage on all significant indicators. A case in point; as reported by the former Aboriginal and Torres Strait Islander Social Justice Commissioner, Tom Calma, Indigenous populations suffer from low income, high unemployment rate, poor education, packed house, and inadequate diet compared to non-Indigenous Australians (Dick, 2007).

In Canada, Canada Health indicates that there are no defined answers to the continuing health gaps in indigenous populations, but some factors appear significant (Canada Health, 2003). Research findings classified these significant factors into social, economic, cultural, and political determinants (NCCAH, 2013). These include social: congested housing, inadequate sanitary infrastructure, and none access to quality education (Frohlich et al., 2006; Greenwood and de Leeuw, 2012; Kim, 2019; Richmond and Cook, 2016). Economic: high unemployment rates and low income (Canada Health, 2003; Frohlich et al., 2006; Greenwood and de Leeuw, 2012; Kim, 2019; NCCAH, 2013). Cultural: the residential school policy prompted the dissociation of spiritual and cultural cohesion within the Indigenous communities (Reading and Wien, 2009). Kim claims that this: «was one of the most compelling pieces of evidence illustrating the nature of colonialism and its deleterious policies that caused the decline of Indigenous populations in not only their overall health but also their sociocultural functioning» (Kim, 2019).

Consequently, Kim, 2019; Richmond and Cook, 2016 and Greenwood and de Leeuw, 2012 mentioned the Political/Institutional factors of health determinants of the Indigenous people to be the residential school system, the lack of political will to reduce the health gaps, racism, social exclusion, and colonialism.

Still in Canada, studies classified the significant factors causing the health gaps as proximal, intermediate, and distal determinants (NCCAH, 2013). Under these determinants are congested housing, inadequate sanitary infrastructure, and non-access to quality education (Frohlich et al., 2006). Others are high unemployment rates, low income, and social exclusion (Canada Health, 2003; Frohlich et al., 2006; Greenwood and de Leeuw, 2012). While these factors are non-disputable, the National Collaborating Centre for Aboriginal Health (NCCAH) revealed that there is a moderate improvement in the socioeconomic well-being of the Indigenous people in Canada over recent years (NCCAH, 2013). This slight improvement could be attributed to some policy responses to tackle the low health status of the Indigenous people.

In the case of the United States, Sequist et al. (2011) used qualitative analysis to highlight some of the challenges to improving the health of American Indian and Alaskan Native people. They categorized the SDH into social inequities, cross-cultural communication, and limited access to healthcare utilization. For instance, American Indian and Alaskan Native people are twice as likely to have low income, have three times high unemployment rate, and are less likely to complete post-primary school education compared to the general U.S. population (Sequist et al., 2011). Also, some educational materials in Indian Health Service (HIS) facilities might not be useful because they are not designed purposely to communicate information to the American Indigenous patients. These materials are not usually written as convenient reading and health literacy levels (Simonds et al., 2011). These communications gaps are augmented by the diversity of the American Indian and Alaska Native people, which constitutes people from 565 distinct tribes with each having unique customs and more than 130 diverse languages (Sequist et al., 2011).

Also, Healthcare utilization within the IHS facilities is limited, in part because of reduced funding and geographical isolation (Sequist et al., 2011). Though the IHS budget was raised by 13% in 2010, the subsequent funding level of $4.04 billion still constitutes only 57% of the needed funding for HIS (U.S. Department of Health and Human Services, 2013). It represents a year per patient expenditure of only $3,348, which is far below the per-patient spending of any other U.S. federal health intervention (U.S. Department of Health and Human Services, 2013).

An isolated or remote location can hinder patients from accessing healthcare services (Goodridge and Marciniuk, 2016). Many patients are compelled to travel a long distance to health facilities and usually lack daily access to the internet and telephones (Sequist et al., 2011). The effects of these obstacles to healthcare utilization are validated in many studies. Less than one-third of IHS doctors confirm better utilization of special care, mental health services, hospital admissions, or diagnostic imaging (Sequist et al., 2011). In a similar context, the Indigenous people in the U.S. lagged behind in educational attainment compared to the whites; they have a prevalence of poverty compared to their White counterparts (Probst and Ajmal, 2019).

The evidence reviewed on inequalities in SDH suggests that social, economic, and psychological factors constitute barriers to Indigenous populations from Australia, Canada, and the U.S. from accessing healthcare services when needed. However, none of the studies specifically identify «what works» concerning tackling the social determinant of the health of Indigenous people (Osborne et al., 2013). For instance, «because social and economic determinants of health are «upstream» or distal causes of population health outcomes that are mediated through a variety of pathways» (Osborne et al., 2013, p. 3). None of the studies reviewed in this section can demonstrate a clear causal link between social determinants and health inequalities. Furthermore, it is challenging to establish which social and economic determinants contribute precisely to cause specific health outcomes (Osborne et al., 2013). This would require extensive and systematic searches of high-quality studies that used participant observation, participatory action research, epistemology/ontology, and ethnography.

Addressing inequalities: Understanding Indigenous health Policy. Health inequalities among Indigenous populations are real, and studies have shown that policy options and governance have been initiated to address the social determinants of health in Indigenous people and their health needs. Creating health equity can be considered as the act to put an end to disparities in health between populations groups such, as the marginalized and non-marginalized groups, that are deemed unjust, unfair, and preventable (Barsanti et al., 2017).

For some time now, Australia, Canada, and the United States governments have worked to tackle the health needs of Indigenous people. For example, in Australia, current government strategies in promoting health equity among the Indigenous populations include the Aboriginal and Torres Strait Islander Healing Foundation, the Australian Government's Fourth Mental Health Plan (2009-2014), the Family Wellbeing Program, and Indigenous-specific programs (Australian Government, 2013).

Also in Australia, recent government interventions to bridge the health gaps between the Indigenous people and the non-Indigenous people include the community-based healing interventions backed by the Aboriginal and Torres Strait Islander Healing Foundation aimed at enhancing the emotional well-being of Indigenous people. There is also the Family Wellbeing Program aimed at improving the capability of participants to handle the daily stresses of life and to support others (Australian Government, 2013).

In Canada, policy options and governance have been put in place to enhance the health of Indigenous people that will lead to health equity. Evidence of this can be seen in the work by (Canada Health, 2003; NCCAH, 2012, 2013; Richmond and Cook, 2016). As can be seen as reported by (Canada Health, 2003), the government agreements to support the establishment of the National Aboriginal Health Organization (NAHO) as well as the Institute of Aboriginal Peoples Health (IAPH) within the Canadian Institutes of Health Research, are positive directions to mitigate the health disparities among the Indigenous people. Likewise, the NCCAH outlined some programmes initiated by the Canadian Government to improve the health of the Indigenous people (NCCAH, 2012, 2013). These include health promotion programs, primary health centres, and public health programs administered by the First Nation and Inuit Health Branch (FNIHB) of Health Canada. Others are the Health Transfer Policy (NCCAH, 2012, 2013) and the Health Council of Canada's recommendations to tackle «inter-jurisdictional and infrastructural disparities»

(NCCAH, 2012). Also, Richmond and Cook (2016) listed the First Nation Health Authority (FNHA) created in 2011 as ground-breaking steps to change the way healthcare is administered to British Columbia's Indigenous population. These programs have worked to address the health challenges of the Indigenous people (Canada Health, 2003). Considerable improvement has been made (Canada Health, 2003), and in some cases, the administration of Indigenous health services is satisfactory (NCCAH, 2013). Nevertheless, the NCCAH claimed that the gaps and uncertainties made by a cumbersome policy environment had created hindrances to equal access to healthcare services (NCCAH, 2013).

In the United States, the Federal Government set up the Indian Health Service within the Public Health Service in 1995 to meet its treaty duties to provide health services to documented American Indian and Alaska Native tribes (Jones, 2006). Through a structure of small health facilities and outpatient health centers, the system offers healthcare services to nearly two million people belonging to 565 tribes, especially those living on federal reservations of in neighbourly communities (Sequist et al., 2011). The 3.2 million American Indians and Alaska Native not covered by the IHS, access care through private or other public healthcare systems (Sequist et al., 2011). Similarly, the American Academy of Paediatrics (AAP) initiated some programs to help reduce health inequalities among American Indian and Alaska Native. Such programs include paediatric emergency services, making a home healthier, stopping gestational diabetes, and collaborating with schools (AAP News, 2019). Still, on the United States, the India Health Service (HIS) a federal health system focused on health information technology on disease prevention and management to enhance health equity in Indigenous communities facing various health gaps (Sequist et al., 2011).

There are both grey and academic studies that have examined policy options and governance meant to reduce health inequalities among Indigenous populations in Australia, Canada, and the U.S. However, there is a lack of quality studies that have evaluated these policy options, which limit the strength to determine achievement associated with such policy options and governance. Further to this, there is limited information on whether these policy options are suitable for the Indigenous population to enhance their health status. With these limitations, future studies need to assess the effectiveness of these policy options and determine if the policy options are culturally suitable to reduce Indigenous people's health inequalities.

Conclusion. This study contributes to knowledge by articulating what is not known about Indigenous health inequalities and social determinants of health and policy response. Already, there are gaps in the existing literature, and this study has fill some of the missing gaps. Aside from the study being useful to policymakers, politicians, development experts and the academic environments, the study provides the opportunity to assess some of the policy interventions. When necessary, it provides the ample opportunity if there is a need to reform the social and health policies meant to reduce health inequalities among Indigenous populations.

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Причини нерівності в стані здоров'я та його соціальні детермінанти для корінного населення Австралії, Канади та США: варіанти політики у відповідь

Автор статті досліджує питання нерівності в сфері здоров'я для корінного населення певних країн. Основною метою дослідження є оцінка причин нерівності у стані здоров'я серед корінного населення та розроблення варіантів політики щодо зменшення розривів у здоров'ї. Систематизація літературних джерел показує, що між корінними та некорінними народами існують відмінності в стані здоров'я, а підходи до вирішення проблеми мають різні форми. Методологічною основою дослідження є порівняльний аналіз, вторинні дані для виявлення нерівності у здоров'ї корінного населення Австралії, Канади

та США. Ці країни ухвалили різні варіанти політики для зменшення цієї нерівності. Порівняльний аналіз сприяє отриманню знань, формулюючи те, що невідомо про нерівність у здоров'ї корінного населення та соціальні детермінанти здоров'я та реагування політики. Для збору даних автор використав методологію систематичного огляду для виявлення, оцінки та узагальнення результатів усіх індивідуальних досліджень з проблеми, що аналізується. Такий огляд дав можливість досліднику сформулювати гіпотезу щодо причини нерівності здоров'я серед різних категорій населення. Дослідження сприяє отриманню знань, формулюючи те, що невідомо про нерівність у здоров'ї корінного населення та соціальні детермінанти здоров'я та відповідні заходи політики. Крім того, що дослідження є корисним для політиків, політиків, експертів із розвитку та академічного середовища, дослідження дає можливість оцінити деякі заходи політики. У разі потреби це надає широкі можливості, якщо є необхідність реформувати соціальну політику та політику охорони здоров'я, спрямовану на зменшення нерівності у здоров'ї серед корінного населення. Автор виявив, що різні академічні дослідження розглядали варіанти політики та управління, спрямовані на зменшення нерівності у здоров'ї серед корінного населення Австралії, Канади та США. Але, на сьогодні, існує обмежена інформація про те, чи підходять ці варіанти політики для корінного населення для покращення стану їхнього здоров'я.

Ключові слова: нерівність у здоров'ї, корінне населення, політика, соціальні детермінанти здоров'я.