

Cultural and socio-economic factors in health, health services and prevention for indigenous people

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Abstract/Summary:

Indigenous people across the world experience more health related problems as compared to the population at large. So, this review article is broadly an attempt to highlight the important factors for indigenous peoples' health problems, and to recommend some suggestions to improve their health status. Standard database for instance, Pubmed, Medline, Google scholar, and Google book searches have been used to get the sources. Different key words, for example, indigenous people and health, socio-economic and cultural factors of indigenous health, history of indigenous peoples' health, Australian indigenous peoples' health, Latin American indigenous peoples' health, Canadian indigenous peoples' health, South Asian indigenous peoples' health, African indigenous peoples' health, and so on, have been used to find the articles and books. This review paper shows that along with commonplace factors, indigenous peoples' health is affected by some distinctive factors such as indigeneity, colonial and post-colonial experience, rurality, lack of governments' recognition etc., which non-indigenous people face to a much lesser degree. In addition, indigenous peoples around the world experience various health problems due to their varied socio-economic and cultural contexts. Finally, this paper recommends that the spiritual, physical, mental, emotional, cultural, economic, socio-cultural and environmental factors should be incorporated into the indigenous health agenda to improve their health status.

Key words: Health priorities, health facility environment, needs assessment, minority groups, social conditions, socioeconomic factors, indigenous health, health, discrimination, inequality, human geography

Introduction

Indigenous people all over the world are historically subjugated, seceded and discriminated, which is explicitly and implicitly affecting their health status also. Studies reveal that indigenous/ethnic populations experience more health related problems and inequalities, as compared to their mainstream populations (Ahmed 2001; 2001; Ahmed et al. 2003; Altman 2003; Fiscella 2004; Hansen et al. 2008; Harris 2006; Karim et al. 2005; Ohenjo et al. 2006;

Subramanian et al. 2006; Williams et al. 2003). Indigenous people or ethnic minorities are adversely affected by reproductive health problems in places where maternal mortality and infant mortality rates are relatively higher. By and large, indigenous peoples experience more mortality relative to non-indigenous peoples (Subramanian et al. 2006). More specifically, maternal mortality rates are significantly higher among vulnerable groups, particularly among the indigenous, ethnic or other minorities groups. For instance, although only a small percentage (4 percent) of all maternal deaths occurred in Latin America and the Caribbean, these deaths occurred disproportionately among indigenous peoples (UNFPA 2005). Previous studies also demonstrate that infant mortality rates among indigenous peoples are higher than non-indigenous peoples in Canada, New Zealand, Australia, Brazil, India, Uganda and Peru, and these differences are significantly greater in the latter four less developed countries (See details in Stephens et al. 2006).

Indigenous peoples' health status and outcomes are embedded within the specific socio-economic, political and cultural contexts, which they are brought up in. This paper is broadly an attempt to highlight the determinants associated with indigenous peoples' health and its consequences on their lives. In doing so, firstly this paper will focus on the background history of indigenous health. Secondly, the paper will discuss different factors, which are important in regard to access to health services and/or prevention for indigenous peoples as well as consequences of these factors in the contemporary world.

Finally, the paper will sum up by suggesting some recommendations for the improvement of indigenous health status. The paper cannot pretend to be a comprehensive and exhaustive study of the topic as it is limited both in time and space.

History of Indigenous Health

Notwithstanding the history of indigenous people is the history of battlefield (Haebich 2005), indigenous people in the west faced even greater threat by diseases after European invasion. The historical writings and scientific research today argue that before European invasion most of the indigenous groups were able to control diseases and enjoyed higher levels of mental and physical health (Colomeda and Wenzel 2002), which is revealed by the following statement:

Skeletal remains of unquestionable pre-columbian date ... are, barring a few exceptions, remarkably free from disease. Whole important scourges [affecting Europeans during the colonial period] were wholly unknown... There was no plague, cholera, typhus, smallpox or measles. Cancer was rare, and even fractures were infrequent ... There were, apparently, no nevi [skin tumours]. There were no troubles with the feet, such as fallen arches. And judging from later acquired knowledge, there was a much greater scarcity than in the white population of ... most mental disorders, and of other serious conditions (Report of the Royal Commission on Aboriginal Peoples 1996:111; cited in Manual 1999).

Health status of indigenous people in the west was deteriorated drastically after European invasion. In Latin America and Caribbean, the estimated total indigenous population dropped from 150 million (Before European invasion in 1492) to 11 million, due to foreign bacterial and viral diseases introduced by Europeans (Montenegro and Stephens 2006). Denevan (1976) argues that the effect of these diseases was catastrophic and in many regions, population fell down by 90 percent or more in the first century after contact with invaders (Denevan 1976;

cited in Montenegro and Stephens 2006). The European settlers had an enormous consequence on Australian Aboriginal health too. Between 1780 and 1880, the aboriginal population in Australia had significantly dwindled mostly due to the infectious diseases, which includes smallpox, tuberculosis, venereal diseases, yaws, measles and whooping cough (Jupp 2001; Smith 2005). The Kanaka Maoli (Native Hawaiians) experienced adverse effects on health due to diseases introduced by foreigners, resulting in depopulation (Anderson et al. 2006). In the eighteenth and nineteenth centuries, Māori in New Zealand, Australian Aborigines, Native Hawaiians, the Saami of Norway, Native Americans and the First Nations of Canada were also affected by infectious diseases such as measles, typhoid fever, tuberculosis and influenza (Waldrum et al. 1995, cited in Durie 2004). By mid of the twentieth century indigenous people, particularly in developed countries were affected by modern health hazards such as vulnerability to injury, alcohol, and drug misuse, cancer, ischemic heart disease, kidney disease, obesity, suicide, depression and diabetes (Cunningham et al. 1996, cited in Durie 2004; McGehee et al. 2004). However, though majority of the world's indigenous peoples live in Asia and Africa, their health history is mostly unknown yet due to the paucity and inaccessibility of literature, and lack of research. Few contemporary studies of particular communities in Asia and Africa argue that the health of indigenous peoples is significantly poorer than that of the general population (Agrawal 2009; Ahmed 2001; 2003; Basu 2000; Islam 2010; Stephens et al. 2005).

Factors Affecting Indigenous peoples' Health

Along with some common factors, indigenous peoples are suffering from particular factors that mainstream people never encounter, such as, indigeneity, colonial and post-colonial experience, rurality, lack of governments' recognition and so on. In addition, indigenous people around the world experience various health problems due to their varied socio-economic and cultural contexts. These intertwining factors will be discussed in the following section.

1. Geographic Location and Rural Lifestyles

Large number of indigenous communities live in extremely remote locations, far from urban cities, formal labor markets, and commercial opportunities (Altman 2003; Stephens et al. 2005), and such geographic location and rural environments directly affects some aspects of their health status. In New Zealand, access to safe drinking water is very poor in small rural communities where mostly Maori people live. In Australia, infectious diseases are higher among Aboriginal people in rural and remote areas which are resulted from sub-standard water supplies, washing facilities and sanitation. Indigenous populations, dominant in remote areas, also experience a higher burden of lower birth weight and neonatal deaths than non-Indigenous populations in Australia (cited in Smith et al. 2008). A study among the Mru indigenous people in Bangladesh shows that distinctive geographic location and long distance to the service center from their place of residence is a determining factor for their low access to health facilities, antenatal care and post-natal care visits (Islam, 2010). Since indigenous peoples are living in rural areas and distant locations, they are usually associated with particular hazardous occupations. Forestry and fishing have the highest death rates of all industry groups, and death rates in mining and agriculture are well above the workforce average in Australia, New Zealand and the US (cited in Smith et al. 2008). Rural lifestyles also influence health care seeking behavior. Rural populations generally display a greater incidence of less healthy behaviors than those of urban areas (Smith et al. 2008).

2. Ethnicity/Indigenous Identity

Ethnicity itself is one of the most significant predictors of poor health of indigenous people all over the world. Studies demonstrate that Aboriginal and Torres Strait Islanders, Maori, Canadian Aboriginal people, and American Indian and Alaskan Native populations are all characterized by a higher burden of disease than the non-Indigenous peoples (Martens et al. 2005; Trewin and Madden 2005; Trovato 2001). This is due to the experience of colonization that continues to impact health and disadvantages the indigenous peoples (Mowbray 2007). This process continues to impact the health among Australian Indigenous peoples where death rates are higher than those of the non-Indigenous population (Altman 2003). Infectious and parasitic diseases are the main causes of death in Aka communities in the Central African Republic, regardless of age, and particularly for men and boys (Ohenjo et al. 2006). Study reveals that infant mortality rates among indigenous peoples are higher than non-Indigenous peoples in Canada, New Zealand, Australia, Brazil, India, Uganda and Peru and these differences are significantly greater in developing countries relative to developed countries (Stephens et al. 2006). The mortality rate among Sami people was much higher than non-Sami people in Sweden during 1776-1815 periods, though their health status improved during the nineteenth century (Sköld and Axelsson 2008). Study also shows that differences in life expectancy between indigenous and non-indigenous populations is estimated to be 19-21 years in Australia, 8 years in New Zealand, 5-7 years in Canada, and 4-5 years in the United States (cited in Ring and Brown 2003). A study conducted by Karlsen and Nazroo states that structural variables of class experience and racial discrimination are significantly related to health outcomes (cited in Cockerham 2007)

3. Dispossession and Dislocation from the Land

Indigenous peoples are used to satisfy all of their needs from land. Their way of life is directly coupled with it. But in many cases their land is confiscated or dispossessed and dislocated by the governments, or sometimes bought for small amounts of money, consequently shrinking their land and food supply as well (WHO 1999). From the Sami in Scandinavia to Amazonian Tribes in South America to North American First Nations and Australian Aborigines, traditional lands and life-ways are being altered in the name of economic development by non-traditional enterprises such as logging, mining, dam building, and various other development projects (Young 1995; cited in Colomeda and Wenzel 2002). This displacement of indigenous people is tied up with cultural disruption, social exclusion, and tension, increased stress, diminished sense of identity and status, political and social subjugation, loss of control over lives and the loss of livelihoods and ultimately poor health (Mowbray 2007; Ohenjo et al. 2006). Deliberate attempts to relocate indigenous peoples have been replacing their land based way of life to new ways of life, dependent on government assistance. The destruction of the local land based economy brought poverty with it. Poverty brought disease, hunger and violence. This is one of the ways which pushes them to illness from wellness (Manual 1999; Ohenjo et al. 2006).

4. Housing

Housing is also important for good health. Study shows that on average, the indigenous household is larger than the non indigenous households (Altman 2003; Frohlich et al. 2006). As a result, relatively large number of indigenous people is living in the same house compared to non-indigenous people. Study also states that inadequate and insufficient housing is a serious problem for aboriginal people in Canada (ten times higher than the national average). In addition, the indigenous people in Canada are highly exposed to infectious diseases such as

pertussis, meningitis, hepatitis, pneumonia, sexually transmitted diseases (STD's) and more recently HIV/AIDS (cited in Frohlich et al. 2006). Since indigenous people are relatively poor, they cannot accumulate sufficient money to buy property or house that non-indigenous people can.

5. Level of Education

Level of education is strongly associated with health status all over the world regardless of race and ethnicity (see Agrawal 2009; Elo 1992; Frohlich et al. 2006; Islam et al. 2009; Raghupathy 1996; see details in Hurt et al. 2004; Plavinski et al. 2003; Murphy 2006, cited in Marmot 2005; 2007). Low education and health status are both causes and effects of low economic status (Altman 2003). However, indigenous education is traditionally discriminated against both in the occident and the orient. Indigenous children are not formally educated and their language and culture are not taken into account in education (Skutnabb-Kangas 1999:43). The studies by Islam et al. (2009, 2010) on indigenous community in Bangladesh noticeably reveal that education is one of the most significant determinants of health. The reproductive health status of Garo people, an indigenous community in Bangladesh, is much better than that of mainstream society due to the influence of Christianity and modern education as the level of education among mothers is 88.8 percent (see details in Islam et al. 2009; Islam et al. 2009; Islam et al. 2010). On the other hand, the reproductive health status of Mro people, another indigenous community, is extremely poor relative to mainstream and other indigenous communities (Mahmud 2006), where the female literacy rate is only 1.12 percent (Rafi 2006). Another study from Australia also shows that the higher proportion of indigenous people in Australia never attended school which results in poorer health (Altman 2003).

6. Income

Income affects health status of indigenous peoples directly and indirectly. Income disparities lead to marginalization, limiting access to education, employment, good housing and nutritious food. The Inuit discussion paper states that "*Inuit view income distribution as a key determinant while Health Canada describes income as the most important determinant of health*" (cited in Mowbray 2007). Study shows that the indigenous family income is lower than the non-indigenous family income (Altman 2003; Frohlich et al. 2006). Study also demonstrates that unequal distribution of income is associated with stress. People with lower income live and work in more stressful environments and conditions, for instance, economic strain, insecure employment, low control at work, and so on (cited in Frohlich et al. 2006).

7. Employment and Occupation

The employment rate of indigenous people is lower than the non-indigenous people (Altman 2003; Frohlich et al. 2006). There are also marked occupational differences between indigenous and non-indigenous people. Indigenous people are classified as unskilled and belong at the bottom end of the occupational hierarchy which is partly a reflection of their low educational status (Altman 2003; Smith et al. 2008). In India, indigenous people are mostly involved in clerical or sales jobs rather than professional jobs. Considering at the continuity of employment, indigenous peoples are involved in irregular employment throughout the year than non-indigenous peoples. Indigenous peoples are also occupied in seasonal employment (Agrawal 2009). A recent study among the Mru indigenous people in Bangladesh shows that more than 90 percent people are involved in agricultural or household works rather than professional jobs or business (Islam 2010). In Canada, the unemployment rate among aboriginal people in 1990 was double than the general population of Canada (Frohlich et al.

2006)

8. Environmental Factor

Albeit the Arctic is often assumed to be a pristine, unpolluted area, there are few industries, especially in Alaska and Canada, which may have a serious effect on the health status on indigenous peoples, particularly among the Inuit in the Arctic. Bjerregaard et al. (2004) argues that *“the imperceptible contamination of traditional foods with man-made chemicals such as polychlorinated biphenyls (PCBs), dioxins, toxaphenes, and other pesticides, which are transported to the Arctic by ocean and atmospheric currents and then are biomagnified in the marine food web, ultimately causing human death.”* On the other hand, the Inuit traditionally emerged to have been protected from atherosclerotic diseases and diabetes due to the particular genetic endowment and/or their high dietary intake of marine mammals and fish, and dynamic physical activity (Bjerregaard, et al. 2000). Study shows that during nineteenth century, child mortality and complicated child birth was a problem for Sami people in Sweden due to cold weather (Brändström 1990, cited in Sköld and Axelsson 2008). The Geneva Declaration on the health and survival of indigenous peoples also demonstrates that impact of environmental degradation caused by mega-projects; extractive industries and toxic waste disposal including trans-boundary contaminants directly affects indigenous health (WHO 1999).

9. Lack of data

Last but not least, lack of data is another significant factor that affects indigenous health submissively, unlike all other determinants that affect their health overtly and covertly. Since most of the cases of indigenous health status is unexplored, particularly in Asia and Africa, policies are not taken into account both nationally and internationally to improve their health problems. On International Symposium on the Social Determinants of Indigenous Health, a study from Peru reports that *“the lack of systematic data collection’ is linked in part to the ‘almost non-existent presence of health care services”,* so that many people *“become ill and die without even a diagnosis”*. This way, the scandalous number of deaths as a consequence of hydrocarbon contamination cannot be made visible.’ The lack of visibility in official data may accord with the reticence in some regions to even acknowledge *‘the existence of “Indigenous” peoples as a category’* (Situational Analysis, p.3, cited in Mowbray 2007). The Canadian Overview paper also shows that *“broad factors contributing to the poorer health status of Indigenous people globally include poor data collection and analysis, gaps in understandings about health and well-being”* (Ibid).

Along with these, indigenous peoples are also suffering due to various cultural practices. Contraceptive pattern influences the women’s health outcomes extensively. Attitude towards contraception and abortion effects family size and in some cases may have a dangerous consequence on maternal health as well (Helman 2000). Pregnancy and child birth practices also affect indigenous health. In Mru society, a most underprivileged indigenous community in Bangladesh, nutrition uptake among mothers after child birth was heavily restricted. After delivery, a mother is given only salted rice and she sits beside the fire from nine to thirty days, depending on their clan practice, and as a result, almost all Mru women suffered from anemia after delivery in Mru society due to their food habits and distinct postpartum care practices. Furthermore, they mostly depend on village healers/doctors and traditional midwives to diagnosis diseases and to solve their problems (Islam 2010). Other studies among indigenous people in India also found similar results where malnutrition was pervasive with high prevalence of anemia due to poor pattern of food consumption, except green leafy vegetables (Agrawal 2009:9; Basu 2000:65).

Though the indigenous health problems were initiated since colonization, it was mostly confined to contagious diseases. To our mind, poor housing, low educational attainment, unemployment, inadequate incomes have amplified their health problems in the recent years that predispose to disease and injury.

Recommendation for the Improvement of Indigenous Health

Indigenous people have some bitter experiences, due to colonization. They have some problems that cannot be solved overnight such as living in remote areas. However, most of the health problems, for example the ones related to socio-economic and cultural factors, can be solved relatively easily. Introducing the WHO Commission on Social Determinants of Health, Michael Marmot states that “*if the major determinants of health are social, so must be the remedies*” (cited in Ohenjo et al. 2006). Since indigenous health is a very critical and challenging issue as compared to non-indigenous people, holistic approach should be taken into account for the improvement of indigenous health which does not concur with many western models. This holistic approach is clearly embedded within the proposed “*indigenous health*” definition of World Health Organization in 1999;

“Indigenous peoples’ concept of health and survival is both a collective and an individual inter-generational continuum encompassing a holistic perspective incorporating four distinct shared dimensions of life. These dimensions are the spiritual, the intellectual, physical, and emotional. Linking these four fundamental dimensions, health and survival manifests itself on multiple levels where the past, present, and future coexist simultaneously” (WHO 1999).

Due to this holistic view of health, indigenous people need multidimensional approach to diminish their health problems by:

- Improving their socio-economic, cultural and political position;
- Providing community based and culturally appropriate health care services that reflects their values, beliefs and traditions (WHO 1999);
- Strengthen their choice to professional care;
- Increasing awareness to health care seeking behavior;
- Developing indigenous health work force that has both professional and cultural competence; and
- Combination of traditional and modern medicine.

Conclusion

Analyzing above discussion, we come up with the conclusion that indigenous health problems are deep-rooted from colonial period to modern era. However, they were outstandingly free from all sorts of diseases before European invasion. It is also notable that during colonial period, indigenous people were torment mostly due to communicable diseases, which includes smallpox, tuberculosis, venereal diseases, yaws, measles whooping cough, typhoid fever and influenza. But in the modern age the pattern and types of diseases are diversified into a larger extent, for instance, as indigenous people are now suffering from cancer, heart disease, kidney disease, suicide, depression, diabetes and so on. And these health problems, in the contemporary world, resulting from socio-economic and cultural factors is a very common phenomenon in the indigenous health discourse, since it is almost preventable in many cases. For instance, reproductive health status of Garo indigenous people in Bangladesh is better than

the Bengali population at large (see details in Islam et al., 2009; Islam, et al. 2009; Islam, et al. 2010). This is due to some positive factors which are instrumental in the community. Lessons learning from the national and international discussions, we may conclude that spiritual, physical, mental, emotional, cultural, economic, social and environmental factors should be incorporated into the indigenous health agenda to achieve their health improvement. In doing so, the state governments should have a positive attitude towards indigenous health.

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