Qualitative research on health condition determinants in the United States and why health disparities and health equity research are relevant

Roungu Ahmmad

In this study, I am presenting the health condition of the United State population and comparison with high-income countries around the world. And wanting to discuss what are the basic health determinants that affect population health status. Finally, this study discuss how health disparities and health equity impact on population health and what is the importance of health disparity and health equity research in population health science and practices. In this study covers the following topics

1. The State of Population Health in the United States
2. The determinants of the Health of a Population and
3. Why health disparities and health equity research is important to population health science and practice.

Initially, I was thinking that population health and public health are the same subject. The application, practice, health-related terms, and model of them are pity similar. But after investigating some details, I find that they are different in application, model and functional activities. Something is similar but the conception and modeling structure follow differences in structural frameworks and formulation.

This study helps me a lot to understand what population health is and what are the fundamental terms and conditions, what are the fundamental principles of population health, what is the measurement of health outcomes, what is the determinant of population health, some basic population health models, and its application with examples. The most sticking part of this course for me is behavior and environment, and how it affects health status which is clearly discussed in this course. Different basic health model and their functions and application of this model are clearly stated and explained in the whole course very effectively and elaborately. I was not pity

clear mathematically some functional form which is used in some health models and could not find mathematical proof of this model, even though it's working very nicely discussed in this course. Maybe I am wrong, but some of the health model discussed in the course which is hypothetical, and the application is not applicable in real-life fields because of a lack of resources and frameworks. Still, I am not fully clear what is the basic dissimilarity between population health and public health including basic terminology, definition, concept, frameworks, and modeling structure and function of them, but I have gotten some concrete ideas about population health and its terms and applications which is discussed in the whole course.

Topic 1: The State of Population Health in the United States

Population health is very multifarious phenomenon of human life and it has a lot of parameters that involve health outcomes. The input factors, processing structure or mechanism or functional form, and the output, are in various ways interconnected. Fundamentally Kindig, DA, and Stoddart G. (2003) define as population health as a health consequence of a cluster of personalities, incorporating allocation of that results within clusters [Kindig, DA, 2003]. This cluster or group can be a geographic population within a nation or within a community and sometimes it could be personnel, ethnic groups, disabled peoples, or any other distinct pools that the healthiness varies within this clusters [Kindig, DA. 2007].

According to Kindig, DA, (2007), population health comprises many features, such as *disparities, determinants*, and *risk factors,* which may be used imprecisely, particularly across different disciplines, such as medicine, epidemiology, economics, and sociology [Kindig, DA, 2007]. National Research Council pointed out that, the United States is the richest country on the earth, but the health condition far worsens in other developed countries [NRC, 2007]. Also, mentioned in NRC report that the US population lives shorter lives and experiences more distress and ailments compared with other high-income countries [NRC Report, 2007]. Furthermore, specifically, in the benefit group of the population may be in inferior health conditions compare with their equivalent parts of the world. For comparison of the health conditions of the US population, the NRC report used nine more common domains such as adversarial birth outcome,

injuries and killings, teen-ager pregnancy and sexual impurities, HIV and AIDS, drug-causing death, fatness and diabetes, cardiovascular disease, long-lasting lunge illnesses, and sickness.

The United States spend more money on health maintenance systems compared with excessive-income countries over the last three decades [Squires S. and Anderson C., 2015] but the health outcomes are not getting to their expectations. Access to care and getting health facilities in the US is a very complex procedure. For individual personal need to take appointments and wait a long time for getting services. In the US, the health service is very costly compared with other countries [NRC, 2007]. Compare with health maintenance facilities, well-timed and reachable health care can reduce lots of these encounters, but the U.S. health system drops, weakening to deliver indicated services constantly to all who could advantage. Modest access to health care provides insufficient deterrence and treatment of long-lasting diseases, tardy diagnosis waste of money and labor [MIRROR, MIRROR 2017]. So, to improve the population's health, the need to be discerning and collaborating work on the health idea is indispensable on behalf of the community and personnel and decrease discrepancies [Kindig, 2007].

My observation is here the different origins of people living and coming from different countries in the United States. Their culture, food behaviors, and genetic variations are different from individual to individual. Also, their body immunity systems are also different. Medical personnel and health care representative cannot easily understand the disease pattern and structure of illness. The function of health determinants implies scatter ways among the population because of their variation of cultural, geographical, and environmental factors. Even though some disparities and limitations of services and barriers, the healthcare personnel need to investigate individual respondents very carefully for understanding and find the disease pattern or health despair, and then to be ensured the best health outcomes.

Topic 2: Determinant of the Health of a Population

The factors, that directly or indirectly affect health outcomes, making healthy and free from disease or illness or injury are known as determinants of health. According to Wilkinson R, and

Marmot M, (2003), the variety of individual, environmental, societal, and financial features that impact healthiness eminence are called determinants of health [Wilkinson R, Marmot M, 2003]. Disease Prevention and Health Promotion pointed out that the determinants of healthiness are a sort of features that stimulate the health importance of individuals or populations [CDC, 2010]. According to State of Air (2000), In all life phases, health is determined by convoluted exchanges between societal and economic factors, the substantial environment, and distinctive behavior [State of Air, 2000], which may be classified in five wide-ranging types known as determinants of health such as genetics, environmental and physical influences, medical care and social factors.

Access to care is a fundamental determinant of health and is defined as the appropriate use of individual health facilities to accomplish the greatest health consequences [IOM, 1993]. According to the Institute of Medicine, the main goal of access to care is to deliver precise care for the exact person at the right period in the accurate place to accomplish the best probable health results [IOM, 2010]. There are several dimensions of access to care such as service availability, utilization of services, relevance and effectiveness, and equity of service. Relevance and effectiveness are important factors for achieving the best possible health outcome with reducing personal, financial, and organizational barriers. These are not only the suitable use of access to care but also provide a high quality of services, and finally deliver the best possible health outcomes. There is some inappropriate use of relevance and effectiveness of access to care called underuse, overuse, and misuse which may cause unfortunate health results.

The inequity of healthcare access is the differential accessibility and exploitation of well-being facilities which sometimes causes the discrimination of services. So, for better health outcomes, need to provide horizontal equity of access which is fairness in access for groups with equivalent needs. Similarly, National Healthcare Disparities Report pointed out that, according to their needs, provide the appropriate services because health problems of different groups differ, needs for similar health problems vary from person to person, and priorities and values differ among groups [NHDR, 2003]. Now, the United States has noble access to care that allows them to advantage of the Nation’s health care system but disparities of socioeconomic status and race are unreasonably characterized among access difficulties [Adams P, Benson V., 2015].

According to IOM (2003), the US population are living longer because of improvements in medical science and expertise and the increasing prevalence of chronic disease situation but they are not getting the services with their expectation. Heart disease, diabetes asthma are now leading causes of illness or worse health status in US. But today the health systems developed, and people are getting treatment quickly because of science and technology. There is a lack of clinical programs and multidisciplinary infrastructure development, people are not getting better access to care or getting better health services in the common chronic disease condition. The health care delivery system in the US is very poor and not meet the challenges of getting the right time right services. Also, this system is overly complex and uncoordinated and makes it slow to get the care and making patients dissatisfaction. These cumbersome processes waste of money and resources and not converse the better health outcomes and therefore it's indication to loss of evidence and collapse to form on the forces of all health consequences [Kohn, L.T., 2000].

According to Janice L. (2017), organizational barriers are predominantly a great issue regarding chronic disease and the fact that more than half of the population with chronic conditions have dissatisfaction strongly about the coordinated care even the health care organization, hospital, physician acting the complete benefit of the patients [Janice L. Clarke, RN, 2017]. Furthermore, Behavior is a strongly associated factors that cause unpair health and disease and the tendency to blame sinful, negligent, indulgent. According to Philos T. (2018), Sometime ignorance reckless slothful, or selfish behavior may be cause of bad health. Also, such behavior may be cause of social and physical or physical environmental problems and make the pathway discrimination and the incidence or prevalence of most diseases and health conditions make downstream [Philos T., 2018]

Determinants of health is a very much influential factors for population health outcomes. For well-beingness, some genetical, medical or financial or organization factors being influence on health outcomes, but some common factors like environmental, social determinant, personal behavior or behavior factors, we can easily maintain for getting better health outcomes. My observation is, behavior and environment factors that may give us at least fifty per cent good health outcome and free from disease or illness or injury. We also know that prevention is better than care. So, behavior can change the disease pattern and free from contaminations of different despair. Sometime community need to change some environmental factors because of involving community. In a

glance, for getting better health outcome, behavioral and environmental determinants play a better role compare with biomedical or clinical determinants.

Topic 3: Why health disparities and health equity research are important to population health science and practice

The difference in health outcomes between the groups of population is known as health disparities. Sometimes, a health difference is strictly connected with their financial, societal, or personal or behavioral status. According to DPHP (2003), the groups of the population can be a social, racial, religion, economic, sex, and age. In addition, the group can be mental health conditions, cognitive ability, or physical disability [Healthy People, 2012]. The U.S. Health Human Services and CDC defined, health disparities as, variation in health consequences and factors amongst parts of the populace. The term health disparities, or health inequalities, or health inequities, have applied implementation for the category of information, which is gathered, and that markers are observed by government organizations (Braveman, 2006).

Health equity is the equal opportunity for getting health services without considering the disparities between groups of populations based on their needs and emergency. According to Braveman P. and Arkin E, (2017), health equity is the nonexistence of biased and disparities in health among population groups [Braveman P and Arkin E, 2017]. They also mentioned that health equity means that everybody has an impartial chance of getting health services and just the changes to be healthy. Good health meaning removing barriers from health consequence, and their significances [Braveman P and Arkin E, 2017]. According to WHO, and Adler, NE (2010), health equity meaning need to reduce or mitigate health disparities and factors that adversely affect excluded or relegated groups [Public Health Rep, 2014 and Adler NE, 2010]. Public Health Rep (2014) pointed out health equity is the principle of reducing and eliminating health disparities. Some other ethicists mentioned health is desired for operational in all province of living [Paula Braveman, 2014]. Therefore, the possessions required to be healthy not only medical care but also health endorsing living and employed circumstances [Braveman, 2006]. Paula B. (2014) pointed out that health discrepancies shown widely held societal standards that told us to have an impartial

chance to be healthful, because of healthiness is a very acute parts of life for well-being, economic and communal occasion [Public Health Rep, 2014].

For realization about the concepts of health equity, the Robert Wood Johnson Foundation (RWJF) defines as health equity meaning that everyone has an impartial and a chance to be healthy. According to Whitehead (1990), health equity indicates that everybody would have a rational chance to become their complete health possibilities and, that none to be avoided from these facilities. Furthermore, she described equity in health is an evenly approach that presented care for uniform necessity, evenly application for equivalent need or excellence of care for everyone.

For ensuring the health equity of population, we need to find the basic obstacles within the community or nation or groups of population.

a) Health disparities Identification. Many disparities are originated in the scope of inequities and to be healthy find the resources that needed. So, the factors of health increased the opportunities to be healthy and that will provide best outcome for everyone.

b) By changing and apply the policies and environments, and by using practices to increase equities and to be healthy. By Elimination of every bad factors that gives rise to inequities, to be insure best health outcomes.

c) By reducing and monitor efforts using short and long-term, we can easily mitigate disparities. We need to find the gap between advantaged and disadvantaged group of population and do not amalgamate the disadvantaged groups of population with the general population. We should stratify the more advantaged group of population and more emergency needed of population so that the need the services on right times. So need to find out the best beneficial group and worsen group and provides equity of health services base on their needed and ensure the best health outcomes.

d) Stimulate process and plan of next steps. Actively engage of disparities and identification, redesign, application and measurement of promising solutions. That’s makes the best possible solution for the best outcome for the right time and for the right person.

Health disparities and health equity are very important factors in population health science and practice, and we need to focus on these deeply for ensuring better health outcomes. If in a community, health disparities exist, then we cannot ensure the best possible health outcome for everyone because of every community people are intercorrelated. So, every individual in a community should get equal opportunity for getting services considering their needs. Disparities makes sometimes social classification or discriminations maybe cause of worsen health outcomes. Sometime disparities maybe cause of social crime or personal dissatisfactions and make injury, accident or even suicide. Equal opportunity is not always fair for getting health services because of needs of services or right times right service for right person does not indicate the equal services. So, equity of service is needed for ensuring the right time the right person is getting the right service from right person.

Conclusion

Even there is a lot of contradictory definition and explanation of population health, in this article, I have discussed some fundamental terms of population health - health outcomes, inequalities, determinants, disparities and health equity. Health conditions of US are very unfortunate compare with high income countries in the world. The health condition of the advantaged group of population in US are worsen compare with other developed countries of the counterpart. Furthermore, US population living shorter lives and occurrence more injuries and sicknesses compared with developed country in the world. Health care facilities, timely access to health care, personal barriers, financial, organization barrier of the United State far from other rich countries. Determinants of health are more common factors that influence the health outcomes. Build in environment, and socio-economic status, economic and environmental factors, personal, behavior determinants which are the more common of health determinant and they are inter-connected. Genetic, medical care, clinical support, access to care are important determinant of populations' health. Health equity is an important factor in population health which insure the right time right person for right service. So, for better health outcome, equity of health service provides better health outcomes without discrimination of services across the population including no disparities among groups. Health disparities and health equity is an important factor for population health and also needed a lot of research and practice for getting better health outcome. The United

States invested a huge amount of money compared with other developed countries, but the health outcome is worsened. My observation is more heterogeneous population are living in the United State- their lifestyle, food consumption, cultural activities, and genetic structure are very different. Among them, they have a lots of disparities of racial, financial status, and genomic structure. So, I am thinking that, these thing make worse health outcome of the United States population. For ensuring better health outcomes, it should be needed a lot of research on health science, stratifications of services, analytics and practices. Finally, should be ensured health equity for everyone which providing the highest possible health outcome and providing special concern to the needs of population who are in unfortunate health conditions based on their current situation.

References

1. National Research Council (US); Institute of Medicine (US); Woolf SH, Aron L, editors. Washington (DC): National Academies Press (US); 2013.
2. Academies of Science Engineering Medicine, http://nap.edu/13497.
3. MIRROR, MIRROR 2017: International Comparison Reflects Flaws and Opportunities for Better U.S. Health Care
4. L. T. Kohn, J. M. Corrigan, and M. S. Donaldson (eds.), *To Err Is Human: Building a Safer Health System* (National Academies Press, 2000); and D. Blumenthal, M. K. Abrams, and R. Nuzum, "The Affordable Care Act at 5 Years," *New England Journal of Medicine Online First,* published online May 6, 2015.
5. Kindig, DA, Stoddart G. (2003). What is population health? *American Journal of Public Health*, 93, 366-369.
6. Kindig DA. (2007). Understanding Population Health Terminology. *Milbank Quarterly*, 85(1), 139-161.
7. Philos Trans R Soc Lond B Biol Sci. 2018 Aug 19; 373(1753): 20170245. Published online 2018 Jul 2. doi: 10.1098/rstb.2017.0245
8. David Squires and Chloe Anderson, *U.S. Health Care from a Global Perspective: Spending, Use of Services, Prices, and Health in 13 Countries* (Commonwealth Fund, Oct. 2015).
9. Janice L. Clarke, RN,[1] Scott Bourn, PhD, RN, EMT-P,[2] Alexis Skoufalos, EdD,[1] Eric H. Beck, DO, MPH, NREMT-P,[2] and Daniel J. Castillo, MD, MBA[2], Popul Health Manag. 2017 Feb 1; 20(1): 23–30. Published online 2017 Feb 1 doi: 10.1089/pop.2016.0076

10. Centers for Disease Control and Prevention. Achievements in public health, 1900–1999 motor-vehicle safety: A 20th century public health achievement [Internet]. MMWR Weekly. 1999 May 14;48(18);369–74 [cited 2010 August 27]. Available from: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm4818a1.htm.
11. Adams P, Benson V. Tables of summary health statistics for the U.S. population: 2014 National Health Interview Survey: U.S. Centers for Disease Control and Prevention. 2015.
12. Wilkinson R, Marmot M, editors. Social determinants of health: The solid facts [Internet]. 2nd ed. Copenhagen: World Health Organization; 2003 [cited 2010 May 26].
13. State of the Air [Internet]. Washington, DC: American Lung Association. Available from: http://www.stateoftheair.org
14. HealthyPeople.gov. Disparities [cited 2012 Nov 20] Available from: URL: http://www.healthypeople.gov/2020/about/disparitiesAbout.aspx.
15. Public Health Rep. 2014 Jan-Feb; 129(Suppl 2): 5–8. doi: 10.1177/00333549141291S203
16. Adler NE, Stewart J, editors. The biology of disadvantage: socioeconomic status and health. Hoboken (NJ): John Wiley & Sons; 2010. [PubMed] [Google Scholar]
17. World Health Organization, Commission on Social Determinants of Health. Geneva: WHO; 2008. Closing the gap in a generation: health equity through action on the social determinants of health. CSDH final report. [PubMed] [Google Scholar]
18. Winslow CE. Poverty and disease. Am J Public Health Nations Health. 1948;38(1 Pt 2):173–84. [PMC free article] [PubMed] [Google Scholar]
19. Braveman P. Health disparities and health equity: concepts and measurement. Annu Rev Public Health. 2006;27:167–94. [PubMed] [Google Scholar]
20. Daniels N. Health-care needs and distributive justice. Philos Public Aff. 1981;10:146–79. [PubMed] [Google Scholar]
21. Daniels N, Kennedy BP, Kawachi I. Why justice is good for our health: the social determinants of health inequalities. Daedalus. 1999;128:215–51. [PubMed] [Google Scholar]
22. Braveman P, Arkin E, Orleans T, Proctor D, and Plough A. What Is Health Equity? And What Difference Does a Definition Make? Princeton, NJ: Robert Wood Johnson Foundation, 2017
23. Public Health Rep. 2014 Jan-Feb; 129(Suppl 2): 5–8. doi: 10.1177/00333549141291S203
24. Braveman P, Arkin E, Orleans T, Proctor D, and Plough A. What Is Health Equity? And What Difference Does a Definition Make? Princeton, NJ: Robert Wood Johnson Foundation, 2017.
25. U.S. Dept. of Health & Human Services, Healthy People 2020. Disparities. www.healthypeople.gov/2020/about/foundation-health-measures/Disparities (Accessed January, 2017).

26. Braveman P, Kumanyika S, Fielding J. LaVeist T, Borrell L, Manderscheid R, Troutman A. Health disparities and health equity: The issue is justice. American Journal of Public Health, December 2011;101(S1): S149-S155.
27. U.S. Department of Health and Human Services, Office of Minority Health, National Partnership for Action to End Health Disparities. Toolkit for Community Action. https:// minorityhealth.hhs.gov/npa/ (Accessed February, 2017).
28. Braveman P. Health disparities and health equity: concepts and measurement. Annual Review of Public Health 2006;27:167-194.
29. Braveman, Annual Review Public Health, 2006. 27: 167-94