Connection between Breast Cancer and Poverty

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"A Perfect Storm of Poverty, Severe Socio Economic Challenges, Low Levels of Education and Catastrophic Natural Disasters Make for Less than Ideal Outcomes for the Most Vulnerable Patients with Cancer"

Abstract
Poverty is associated with the higher cancer rates, cancer risk factors like tobacco used and obesity, and lack of access to cancer screening and the treatment. Breast cancer may be caused by the occurrence of malignant tumors, is one of the structures of composing the organs, which is formed due to uncontrolled reproduction of cells that went through a complex process of transformation and may evolve by direct extension or through metastatic dissemination. The main symptoms are palpable nodes and deformations especially the cambers or retractions in the breast part. Constitutional symptoms such as asthenia, fever and weight loss may also compose a clinical condition. People with lower socio economic status have high cancer deaths than those with higher socio economic status, regardless of the demographic factors which includes race/ethnicity. Only small things can be known about the breast cancer among economically disadvantaged women, except the two generally accepted facts, low income women are likely to be diagnosed more with the later stage of the disease and have higher mortality rates. Being uninsured may lead to health services, and thereby creating delays or even the absence of screening, diagnostic and also the treatment services. Lack of access may account for women diagnosed when the cancer is advanced, reducing the women’s chances of survival.

Keywords: Poverty, Breast Cancer, Health Systems, Effects of Poverty, Health and Poverty, Social and Economic Factors.

Introduction
Cancer is the second leading cause of death globally, which accounts for an estimates of 9.6 million deaths, or one in six deaths in the year 2018. Lung, prostate, colorectal, stomach and liver are the most common types of cancer in men, whereas colorectal, lung, cervical and thyroid are the most common types of cancer in women. The cancer burden and poverty continues grow rapidly exerting tremendous emotional, physical and financial strain on individuals, communities, families, and health systems. Many health systems in low and middle income countries are prepared to manage this kind of burden and huge numbers of cancer patients do not have access to timely quality of diagnosis and treatment.
In many countries where the health systems are strong, survival rates of many types of cancers are improving the accessibility at early deduction, quality treatment and survivorship care. (WHO). Breast cancer is the most common type of cancer in women, and its incidence is increasing especially in the developing countries. Global burden of breast cancer in women, which is measured incidence, economic costs and mortality is substantial and on the increasing trend. Worldwide, it estimates that more than one million women are diagnosed with breast cancer each year, and more than 400,000 people will die from the disease. In low and middle income countries, the resources and infrastructure for screening the mammography is unavailable. In most of the countries breast cancer is usually diagnosed at early stages and due to inadequate resources, women with breast cancer may receive the inadequate treatment or palliative care.

Review of Literature

Kevin M. Gonrey et al. (2015) analyzed the study on breast cancer among women who are living in poverty. The populations of people who are living in poverty in the United States were marked as 37.5 to 46.2 million from 2007 to 2011. The most common type of cancer among women in North America, which directly affects one of every eight to nine women during their lives, their programs is typically excellent with the early diagnosis and timely access to treatments. The people who are living with the high risk of poverty remain much greater among racially or ethnically diverged people in the United States. This study concludes that women living in poverty with breast cancer receives better care and are more likely to survive in Canada than in the United States.

Janis Barry et al. (2012) examined the study on increasing poverty levels for determining late stage breast cancer diagnosis in 1990 and 2000. Living in high poverty and economically distressed areas like San Francisco and Atlanta put women at significantly elevated risk of late stage breast cancer diagnosis in 1990. A large literature has established that neighborhood poverty exerts an independent effect on health, including breast cancer diagnostic stage and survival. Poverty, race/ ethnicity and the spatial distribution of health care resources are important determinants of both mammography use and breast cancer stage disparities.

Antonio dos Santos et al. (2021) examined the study on breast cancer, poverty and mental health: emotional response to the disease in women who are from popular classes. Breast cancer is may be caused by the occurrence of malignant tumors in one of the structures composing the organ, which is formed due to uncontrolled reproduction of cells that went through a complex process of disordered transformations and may evolve through direct extension or metastatic dissemination .This study aims to analyze the emotional response of a low income group of women. This disease is the most common type of malignant neoplasm in females in many of the countries, the incidence rates which increases every year as a reflex of the global trend towards pre dominance of lifestyles that promote exposure to the risk factors.

Xiong Lili, MD et al. (2020) analyzed the study on country level poverty status in 3.5 million rural women. Breast cancer is the most frequently diagnosed cancer and the second leading of cancer related deaths in women worldwide. Notably breast cancer incidence and mortality rates among Chinese women in rural areas have increased rapidly during the last ten years. China has undergone significant development and remarkable change in social economy, which results a shift from a pre dominantly rural lifestyle to more western/ urban lifestyles over recent decades. To conclude the study we explore the differences in effects of implementing the breast cancer screening program and in clinical examination results between breast cancer patients in poor and non poor countries in rural areas of Hunan province from 2016 to 2018.

Effects of Poverty on Society

Problems like hunger, illness, and poor sanitation are the causes and effects of poverty. The effects of poverty are more interrelated so that one problem which rarely occurs to be alone. Bad sanitation makes one susceptible to that disease, hunger and lack of clean water makes even more vulnerable to the diseases. Impoverished countries and some communities still suffer from discrimination and end up caught in a cycle of poverty. Vicious circle of poverty means lifelong barriers and troubles are
Unemployment and low incomes creates an environment where the children’s are unable to continue the school levels, many fail to see how hard work improves their lives as they see that their parents struggles every day. Ultimately poverty is a major cause of creating social tensions and threats to divide a nation because of income inequality. Wealthy or developed countries maintain a stable level, because of the presence of middle class. This may cause when the wealth of a country is poorly distributed among citizens. However western countries are gradually losing their middle class. For the society, poverty is very dangerous factor that destabilize the entire country. The Arab Spring is a great example of how the revolts can start because of few job opportunities and high level of poverty. The effect of poverty on terrorism takes place is not as straightforward as the media often perceives it to be. Poverty fuels terrorism by creating a misery and frustration which pushes the people to join the terrorist organizations. In the end poverty is a major cause of the social tensions and threats to divide the nation, because of inequalities issues, in a particular income inequality. One of the effects of poverty on children’s development is to lead them to build the anti – social behavior that acts as a psychological protection against the environment. A universal and easy measure of poverty consists of different populations, health and life expectancy. The trend towards more single parent families has made the things worse and women have become more vulnerable to the environment. Good governance and good management of all the resources remains the best way to tackle both environment and poverty problems.

**Health and Poverty in India**

India is the second most populous country after china about 1.2 billion people and it is the seventh largest country in the world with an area of 3,287,000km. Highly contrasted country enjoys the growth rate of 10 percent over many years and it is the largest economies in the world, with the GDP of 1,644 billion US dollars. But only a little percent of the Indian population has benefited from the impressive economic boom, as the majority of people in India are still living in abject poverty. More than 800 million people in India are considered to be poor. The lack of employment which provides a livable wage in rural areas which drives many Indians into rapidly growing areas like Delhi, Bombay, Bangalore or Calcutta. The poor hygiene conditions are the causes of disease such as cholera, typhus and dysentery in which especially the children suffer a lot and die. India is one of the world’s top countries when it comes to malnutrition, more than 200 million people did not have sufficient access to food, which includes 61 million children’s., about 7.8 million infants were found to be having a birth weight of less than 2.5 kilograms. 2. 7 million Indians were infected with HIV virus, around 220,000 of them are children, with the rising tendency. The lack of education and lack of condoms means that the virus is spreading faster and more people are dying of AIDS especially in the slum areas of the growing cities. More children are living there so called AIDS orphans, which has been infected with the virus as well. Lack of affordable hospitals, ill equipped health professionals, fake and expensive drugs, childhood malnutrition, neglect of women’s health and paucity of funds, are the factors which affects the Indian health sector. The increasing costs of the treatment especially in corporate hospitals, is making the life of the citizens more difficult. People dread falling into sick for fear of falling into a debt trap. In many situations, the costs of medicines, tests, devices and interventions is very high and unessential that it is a sheer wastage of the resources. A significant share of India’s population seems to avoid the formal medical system; they face a debilitating financial burden. Many families opt for any treatment even when a number faces a life threatening diseases, about 39 percent do not receive any medical attention before death. Rich persons, identify a relatively a small indisposition as ailment and go for the treatment, whereas poor perceive an ailment only when it works disabling or it may be life threatening. One of the major reasons why India’s poor incur debt is the costs of healthcare, which has raised the disproportionate to the income levels. Only few less than 15 percent of the population in India has any type of health care cover, it can be community insurance, social insurance and employer’s expenditure etc.
Social and Economic Factors

Social and economic factors like income, education, employment, social supports, and community safety can affect how well and how long we live. The social and economic opportunities like good schools, strong social networks and stable jobs are the foundation to achieve a long and healthy life. For example, employment provides income to shape the choices about education, housing, childcare, food, medical care and more. On contrary unemployment limits this type of choices and ability to accumulate savings and assets that help especially in the times of economic distress, social and economic factors are not taken into account when it comes to health, however strategies to improve these factors can have a great impact on health over time those traditionally associated with the health improvements such as strategies to improve health behaviors.

In the social and economic factors of the Country Health Rankings are:

- Education- which shows who in a community has graduated high school or attended college, in addition to the percentage of teen age and young adults aged from 16 to 19 who are neither working nor in school.
- Employment- Complete details of unemployment statistics.
- Income – Which shows the children in poverty and income inequality
- Family and social support- Provides information on children of being a single parent households and access to improve social opportunities.
- Community Safety- Which measures violent crime and injury deaths.

Connection between Breast Cancer and Poverty

Social determinants of health have examined in relation to breast cancer incidence, diagnosis stage and survival which includes socio economic status, neighborhood disadvantage unemployment level, social support, racial discrimination etc., Other social determinants of health which includes medical distrust, immigration, inadequate, housing, status, food insecurity and some of the geographic factors like neighborhood access to health services. Socio economic factors influence the risk of increasing breast cancer. Low socio economic status is associated with increasing the risk of premenopausal breast cancers as well as late stage of diagnosis and poor survival. Poverty is associated with other factors which relates to late stage at breast cancer diagnosis and poor survival such as inadequate health insurance, lack of primary care physician and poor access to health care. To address these social determinants and reduce cancer disparities, effective interventions are required that account for the social and environmental contexts in which breast cancer patients live are treated. Breast cancer survival rates have increasing, and the number of deaths which is associated with this disease is declining, largely due to factors like a new personalized approach to the way of treatment and better understanding about the disease.

Conclusion

Poverty is becoming a great issue the world. Though many organizations have created to find solutions for this matter, no one can save the world complementary from poverty. The most common fact which we realize when we consider the information about poverty is that poverty is has occurred mostly in developing countries. Increasing the number of organizations which works to reduce poverty by educating people in developed countries to be organized to take actions which is related to this matter is also another suggestion. Encouraging the people who volunteered to provide facilities like pure water, foods filled with nutrition’s, living places to the poor people and conducting charity services to develop the lives of them by offering special rewards and admiring in various ways would be a good way to increase the number of voluntary workers. A subsequent deal with heterogeneity of both groups of women and its relationship to the poverty. Finally the poverty of two groups of women is analyzed from the perspective of two sources of income: one is from the market and another one is from the government transfers.

References

Attacking Poverty while Improving the Environment: Towards Win-Win Policy Options. UNDP, 2013.
Aulas, Jean-Jacques. “Alternative Cancer Treatments.” Scientific American, 1996.

Barry, Janis, et al. “Significance of Increasing Poverty Levels for Determining Late-Stage Breast Cancer Diagnosis in 1990 and 2000.” Journal of Urban Health, vol. 89, no. 4, 2012, pp. 614-27.

Brown, J., et al. “Incidence of Health of the Nation Cancers by Social Class.” Population Trends, vol. 90, 1997.

Coleman, M.P., et al. “Trends in Cancer Incidence and Mortality.” IARC Scientific Publications, 1993.

Daling, J.R., et al. “Risk of Breast Cancer among women: Relationship to Induced Abortion.” Journal of the National Cancer Institute, vol. 88, 1994, pp. 1584-92.

Doll, Richard. “Health and the Environment in the 1990’s.” American Journal of Public Health, vol. 82, no. 7, 1992, pp. 933-41.

Foley, Kathleen M. “Controlling the Pain of Cancer.” Scientific American, 1996.

Gorey, Kevin M., et al. “Breast Cancer among Women Living in Poverty: Better Care in Canada than in the United States.” Social Work Research, vol. 39, no. 2, 2015, pp. 107-18.

Henderson, Maureen. “Current Approaches to Breast Cancer Prevention.” Science, vol. 259, 1993, pp. 630-31.

Hulme, David. Global Poverty: How Global Governance is Falling to the Poor People. Routledge, 2010.

Kessler, L.G., et al. “Projections of the Breast Cancer Burden to U.S. Women: 1990-2000.” Preventive Medicine, vol. 20, 1991, pp. 170-82.

Lili, Xiong, et al. “Analysis of Breast Cancer Cases According to County-level Poverty Status in 3.5 Million Rural Women who Participated in a Breast Cancer Screening Program of Hunan Province, China from 2016 to 2018.” Medicine, vol. 99, 2020.

Peres, Rodrigo Sanches, and Manoel Antônio dos Santos. “Breast Cancer, Poverty and Mental Health: Emotional Response to the Disease in Women from Popular Classes.” Revista latino-americana de enfermagem, vol. 15, 2007, pp. 786-91.

World Cancer Report: Cancer Research for Cancer Prevention, edited by Wild CP, et al., International Agency for Research on Cancer, 2020.

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