

# Health System, Health Equity

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## Abstract

Many health issues have their roots in social aspects of everyday life. In this regard, health should be considered not only a biological matter but also more importantly a social subject. In this study, we reviewed important aspects that should be acknowledged by health system in achieving health equity, considering social determinants of health (SDH). Google Scholar was searched with relevant key words. We also reviewed the documents of world health organization (WHO) relevant to SDH and health equity. Finally, based on this review, we have presented the measures that should be taken by health system to achieve health equity.

## 1. Context

Many health issues have their roots in social aspects of everyday life. In this regard, health should be considered not only a biological matter but also more importantly a social subject. Study on social aspects of health could be an important way to promote health status in both developing and developed nations; but unfortunately health professionals are not prepared for these social interventions and research in this field is weak.

## 2. Evidence Acquisition

In this study, we reviewed important aspects that should be mindful in achieving health equity by health system considering the social determinants of health (SDH). Google Scholar was searched with relevant key words. We also reviewed the relevant published documents and congresses held by world health organization (WHO). Finally, we have presented the measures that health system should consider to achieve health equity.

## 3. Results

### 3.1. Social Determinants of Health (SDH)

Kenneth Newell published a book in 1976 called "Health by the people". In that book, he says that the causes of many health problems are related to some factors in the communities themselves, known as social determinates of health (SDH) (1). SDH includes economic, social, cultural, environmental, and political factors. In fact, SDH means the conditions in which an individual is born, grows, lives, works, and ages (2).

SDH includes environment and condition of the first years of life; education; occupation and its environment; gender; economic status; food security and nutrition; shelter, its location and living condition; safe drinking water; sanitation; transportation; social isolation, position and support; recreation; and war and internal conflicts. Obviously, not all social elements have the same effect on people's health. Indeed, those factors that can lead to the stratification of the community (structural factors) have the most striking effects.

### 3.2. Biological Factors

Although social factors are far more influential on people's health status than biological elements, medical education, research, health services and resources are practically concerned only about biological factors and virtually none about SDH.

The main reason for focusing so much on biological aspects of medicine is the huge and profitable financial investment being made in medical technologies and pharmaceutical industries. Those international companies and their representatives are the main forces behind all the demands induced throughout the world. During the last few decades, many papers have been published in different medical journals regarding this issue. The latest of those articles are four papers about overuse and underuse of medical services and procedures around the world, published in Lancet in January 2017 (3-6).

In our country, the situation is not much different. Increasing pressures by the manufacturers of the medical equipment and devices have forced directly or indirectly the health authorities and/or the public health insurance companies to pay for very expensive products, and unnecessary procedures, without having any kind of clinical

guidelines or any supervision.

The pharmaceutical companies have also succeeded to import a variety of very expensive and often unnecessary pharmaceutical products through creating induced demands. It is worth noting that practically none of these products is under the National Drug Lists. The overuse of those expensive medical equipment, medical devices, and very expensive pharmaceutical products has led the health insurance companies to go broke. This matter has also overshadowed and under-weighted the preventive medicine such as immunization services as well as outpatient services.

According to the seventh annual edition (2015) of "Generic Drug Saving in the U.S.", 88% of the prescriptions dispensed in the U.S. in 2014 were generic drugs. While the U.S. and European countries are moving constantly and rapidly toward prescribing generic drugs (7), our country is moving away from this direction.

### 3.3. Health Equity

Health equity that means equity in benefitting from health care and health services is so much related to SDH. On the contrary, health inequity refers to the circumstances in which avoidable, inequitable, and remediable health differences exist between different groups of society (8). This is not a natural difference, but a condition caused by inequitable policies. Health equity is an index showing the feeling of the governments toward their people.

### 3.4. The Health Sector and Health Equity

The main challenge for health equity is the fact that managements do not act against the roots of inequity in health. The health sector has a major role to play against health inequity. The health sector should be an advocate and support, as well as a guide, for the other sectors regarding how to deal with the issue, and not to behave as a leader (9).

The health sector should be the first to get involved in health equity. All health services at all levels should practice equitably toward all people and different social groups. If the health sector does not reduce health inequity in its own sector, it should not expect others to take steps in this regard (10).

Health equity should be the base and the core of all health care programs and health care services. The health sector can reduce the health inequity to a great extent through universal health coverage (UHC) (11).

Poor and underprivileged people are much more in need of health care and health services; therefore, the

health sector should allocate an adequate budget to respond to all their needs as well as to make sure that the entire allocated budget is used for that purpose. Obviously, the aim should not be to offer them only a basic health package, but to make sure that the quality, effectiveness, and priorities are being addressed, and SDH are being responded to properly (12).

Regretfully, instead of trying to reduce inequity through serving the lower socio-economic groups, the health sector usually serves the more affluent people and those who are less needy. If health equity is not emphasized enough and lower socio-economic groups truly are not prioritized, mere increase in coverage will make the health inequity even worse.

In order to act against health inequity, the following vital measures should be taken: allocating an adequate budget for lower socio-economic groups (13); selecting proper locations for health centers; making sure that they are easily accessible for underprivileged people; and rectifying the type of approach and behavior of health human resources in dealing with poor and less privileged people (14).

### 3.5. The Role of Health Professionals in Achieving Health Equity

Professor Michael Marmot raises a question in one of his books. "While the fire fighters in Liverpool (U.K.) teach people and children about how to build houses and fight against tobacco smoking in order to prevent fire, would it be too much to expect physicians to become seriously involved in preventive health care" he says. He also says while diseases are caused by the conditions in which people are born in, grow, live, work, and age (i.e. SDH), should the physicians not get involved in finding the causes of those illnesses and dealing with them?"

Although most of the SDH (such as ECD, education, occupational activities, income, living conditions, environment, etc.) are beyond the easy reach of the traditional health sector, due to their enormous influence on health, they require a great deal of attention.

Acting against health inequity is considered a matter of social justice. To make sure that people are receiving the highest quality of health care, fighting against health inequity is essential. Preventive health care prolongs the people's lives, and adds to their healthy years of life and at the same time, it is quite economical and saves a great deal of resources (12).

Physicians and other health professionals should be educated about SDH and obtain proper skills in this regard. In addition to the general skills that health professionals and particularly physicians should acquire during their training, they should learn about history taking regarding

social conditions of the individuals and about how to refer them to social services when needed. Skill in communication and advocacy is very important in order to help improve the living condition of the clients, patients, and their families.

Due to the knowledge, expertise, skills, and respect that health professionals and particularly physicians enjoy in the community, they should use their prestige to advocate those policies that reduce health inequity, and they should fight against those policies that can lead to health inequity. Health professionals should act individually as well as organizationally against health inequity. They should put intensive pressure on the government to rectify health inequity (2, 15).

### 3.6. Reducing Hospital Beds in the U.S

In the USA, despite the high GDP and high health expenditure per capita and also in spite of low family support while being hospitalized, only one out of every one thousand Americans needs to be admitted to a highly equipped hospital annually. Through expanding PHC and day-care facilities, reducing hospital infections and the length of hospitalization, they have reduced 25% of the hospital beds during the last few decades. They have also reduced the number of intensivists and sub-specialists, and instead they have increased the number of their family physicians, pediatricians, internists, and psychiatrists. They are also promoting self-care, PHC, and health promotion (16).

### 3.7. The Role of Medical Education in Health Equity

Medical education should be reorganized based on primary health care (PHC). Due to the great influence of SDH on non-communicable diseases (NCD) and health equity, medical education should include teaching this important subject in the university courses for undergraduates, post-graduates, continuing medical education, and in-service trainings. Indeed medical education and all health related education should be reorganized so that prevention and promotion of health, PHC, SDH, health equity, health ethics, and spiritual health become the priorities of medical education (17).

Another very important subject is the location where medical education takes place. Regretfully, so far the location has been at the bedside of patients in hospitals, a place where general physicians will practically have nothing to do with care giving in future. Instead, the location of medical education should be in the deprived communities, health centers, outpatient facilities, and everywhere social services are offered. When hospital rotation is necessary, it should be in general wards and not in the sub-specialty wards or the intensive care services (18).

Another important point is to facilitate the entrance of the youth from the lower socio-economic groups and deprived areas to medical and other health related schools (19).

### 3.8. Primary Health Care (PHC)

In 1978 in a huge gathering in Alma-Ata, Health for All by the year 2000 (HFA 2000) was introduced and the PHC was recognized as the key and the main strategy to reach HFA 2000. In that meeting, addressing those social, economic, and political factors which are harmful to people's health was emphasized (20). The recommendation of that gathering was discussed and passed as a resolution in the following world health assembly.

The main pillars of PHC are political commitment, community participation, intersectoral cooperation, using appropriate technologies, and health system research (HSR) (21).

### 3.9. Intersectoral Cooperation

In 1980s, Americans were surprised that in spite of their high GDP and high per capita health expenditure, their health indices were only comparable with a number of low-income countries. Consequently, the Rockefeller foundation performed a research in 1985 called: "Good Health at low cost" (22). They studied the health status in China, Costa Rica, Sri Lanka, and the state of Kerala-India. They concluded that the common reason for such a drastic progress in those countries was the presence of a very close intersectoral cooperation regarding SDH. Although Cuba was not included in the Rockefeller's study, the situation in Cuba was quite similar to those countries.

All those countries' main efforts were to diminish poverty, create jobs, act against gender, and other types of discriminations, make education compulsory up to a high school diploma particularly for girls, teach health related issues at school, expand PHC services throughout their countries, and make the entire system of health services free of charge. Besides solid intersectoral cooperation, other reasons for those countries' success were community participation and strong political will.

### 3.10. Community Participation

If health inequity is to be rectified, community participation is quite necessary. To encourage and be assured of participation of lower socio-economic groups, first they should be enlightened, educated, and equipped with simplified and analyzed information (23). Almost in all health care programs, there are some groups either deprived of health care or receiving undesirable quality of care. Those groups should be identified and the obstacles be removed.

The obstacles could be one or combination of the followings: an inadequate budget; improper location of the health centers; inappropriate timing of health services; inadequate skills; lack of expertise and improper attitude or behavior of the health workers. Preventive and promotive health care should be included in all health programs and careful monitoring should be implemented, as well (24).

### 3.11. The Role of Modern Medicine

According to the studies done mainly in the industrialized countries, the share of sophisticated medicine in reducing mortality rate has been less than 4%, while the role of SDH in this regard has been far more than 50%. One of those studies showed a rapid decline in the mortality rate caused by tuberculosis in the U.K. between 1855 and 1956 that was long before the discovery of BCG and antituberculosis drugs (25).

Another study showed a rapid decline in Infant Mortality Rate in Australia, between 1881 and 1975, which was also long before the discovery of different vaccines and antibiotics (26).

According to these examples, the decline in the mortality rate between 1,750 and 2,000 was due to the improvement in nutrition as well as sanitation that materialized long before modern medical services became available.

### 3.12. Health Indices

Health indices are usually calculated on average. This method obviously does not reflect health equity. In order to recognize and rectify health inequity, the quality of care and SDH such as age, gender, education, occupation, income, wealth, shelter, race, and other factors should be considered. In order to measure and monitor progress in health equity, using average figures as an index is not only unreliable, but also misleading because it usually hides the realities such as stagnation or even worsening of health inequity (27).

### 3.13. Life Expectancy

Health inequity exists within and between countries. The difference in life expectancy between some countries exceeds 30 years (28, 29), and within countries up to 10 - 20 years and possibly even more. The under-five mortality rate in some countries is 100 times higher than that of some other countries.

Although the amount of GDP can make some differences, there is no direct relationship between GDP and life expectancy. For example, despite the fact that GDP in the U.S. is several times more than Cuba and Costa Rica, their life expectancy is very close. According to the UNDP, in 2003, Costa Rica ranked 25th in the world in life expectancy,

while the U.S. ranked 29th and Cuba ranked 13th. According to WHO in 2015, Costa Rica ranked 13th, the U.S. 31st, and Cuba 32nd. It is worth mentioning that the "egalitarian" countries (i.e. Scandinavian countries) are better than capitalist ones in this regard.

## 4. Conclusions

### What should be done?

The condition of people's daily living should be improved. Great attention should be given to girl's and women's health (30) as well as to the health condition of their babies being born; early childhood development (ECD) program should be implemented (31); girls' and boys' education should be facilitated; living and working condition and social support should be improved for everyone; and a healthy, happy, and flourishing life should be facilitated for the elderly. In addition, measures should be taken against inequity in wealth, resources, and social power; the obstacles should be recognized and proper measures should be taken to remove them (32).

The scientific aspects of SDH need to be explained and taught. Those who have been educated should subsequently educate the policy-makers and health-care providers. They should also try to raise the community's knowledge and awareness and encourage people's demands regarding SDH.

Equity from the start of life, including physical, psycho/social, and language/cognitive development, has a determining influence on the individual's life and health through the development of skills, education, and job opportunities. ECD refers to a period of life starting before birth and continuing to eight years of age. ECD can affect the risk of obesity, malnutrition, mental health disorders, heart diseases, and even criminality.

Investment in the early years of life advances the reduction of health inequity in a generation. Brain development in the early years of life is very sensitive to different factors with lasting effects throughout the entire life of an individual. Proper nutrition is vital for ECD, starting with mother's nutrition during pregnancy. Maternal care should start before pregnancy and continue until delivery; and mother and child care should continue throughout the first years of life.

Children are in need of a safe, healthy, protective, responsive, and nurturing environment. Education in preschool and school ages plays a vital role in promoting the children's capabilities (31).

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