

## **Module 3 : Socio-economic Status and Health Income Inequality and Health**

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#### **Socio-economic Status and Income Inequality**

Based on the chapter by Lynch, J. & Kaplan, G. (2000). Socioeconomic Position. In L. F. Berkman, & I. Kawachi (Eds.), *Social Epidemiology*, (76-94). New York: Oxford University Press.

In this section we will consider the impact of inequality and its effects on health. Both financial and social inequality affect health – the effects of socio-economic status and income inequality will be covered in this lecture and in the following lectures discrimination and the effect of neighborhoods will be considered.

In this lecture we will cover the meaning and measurement of SES and the limitations of this measure. We will also look at the indices of inequality and the factors influencing health in low and high income countries.

A general pattern indicates that higher socioeconomic status (SES) is associated with better health, across time periods.

SES determines the position that individuals or groups occupy in the structure of society. SES demarcates society.

From a Marxian perspective class was determined by the ownership of capital and was characterized by an exploitative relationship between the owners of capital and those who provided labor. This is a dichotomous model.

Webber emphasized the distribution of opportunities linked to production and social honor or privilege that was independent of wealth. Social honor was linked to life style or people sharing a way of life. These opportunities determined peoples "life chances" which they could improve by collective bargaining or obtaining more skills and knowledge.

The Functionalist approach to class is that it is a natural and necessary feature of a complex society. The Functionalist view of inequality is that it is the result of "natural" forces and an indirect legitimizing of it.

#### **The Implications of SES**

SES determines lifestyles, Bourdieu (1984))(as cited in Lynch & Kaplan(2000) indicates how class is related to home décor, taste in music, food, opinions on art and desirable vacations. Thus diet and exercise and health seeking behaviors and definitely psycho social factors would necessarily also be influenced by class. Class is a pervasive influence like a lens through which you perceive the world.

The kind of resources that are available to one across ones lifetime often gets determined by class – often there is movement up and down between SES - movement down through loss of employment or retirement or illness or a accident or disaster. Upward mobility is through better jobs, opening up of the economy, better pay packages. In India the educated class has benefited from the opening up of the economy but not the uneducated class - who may have benefited marginally but in fact after liberalization – the gap between the haves and have nots has only widened. The haves or the middle class are now routinely going for foreign vacations, owning cars and buying designer clothing and branded merchandise that they never did previously. There were fewer choices available and people did not flaunt their wealth.

#### **How is SES measured?**

The usual convention in research studies is to take a composite of income, education and occupation as a measure of SES.

**Education** is indicative of a privilege – a postponement of earning a living, indicative of the time and money that is available to allow people to defer earning a living. It reflects parents SES.

It is a transition from childhood to adulthood – it determines future occupation and income.

Education is usually measured as number of years of education. Although this is a conventional unit of measurement – there are certain problems with it

- for quantity does not imply quality
- the value of a certain education/degree in a certain culture and context may vary (for e.g. a law degree vs an engineering degree in India versus the U.S.)
- the economic returns of education may vary, some degrees having more value
- the returns may vary according to race, ethnic and gender groups (Lynch & Kaplan, 2000)

In a stagnant society education has different implications (value knowledge for its own sake) and in a booming economy it has different implications (applied disciplines like engineering or certain techniques become valued e.g. computer applications) – there is an opportunity for upward mobility(Lynch & Kaplan,2000).

**Employment** creates a structure in people's lives. The lack of employment also creates a different structure. Work is a link between education and income.

Work environments vary in terms of exposure to hazardous factors – some jobs in mines or mills or nuclear plants or dump sites can be very dangerous and there is an exposure to toxins. Heat, dust, pollutants, physical stress, radiation or the probability of accidents may be part of the work environment. The mental stress of a job also has to be considered. Some jobs come with health care or health insurance like government jobs in India, which greatly improves access to health care. Women often bear the domestic burden in addition to a paid job.

**Income** is directly related to access to resources and material conditions, income has a documented relationship with life expectancy. Type of housing, location, food, quality and access to medical care.

The public health approach that arose in the 19th century due to the working conditions in the aftermath of the industrial revolution emphasized, clean water, shelter, adequate calories and waste removal.

Now however these basic material conditions do not determine the differences in life expectancy and health between social classes. Rather the differences may be attributed to finer gradations of material conditions such as access to cars, home ownership, a home with a garden and healthier food (Davey Smith et al 1990, Macintyre et al, 1998, Blane et al 1997 as cited in Lynch & Kaplan,2000) .

In India however the basics are still relevant as many groups do not have access to them – for e.g a slum population or certain rural populations. The finer material condition differences are also relevant between the lower middle class and the upper middle class.

Shelter can be very basic to a comfortable house with a garden. Slums have tin sheet roofs that make the room into a furnace in the summer. In the rainy season the drain water mixes with the rain water spreading filth everywhere.

2000 calories can be made up of vada pav and dal chawal or a variety of fruits and vegetables and fish and chicken.

So it is not just Roti, Kapda aur Makan – however for the basics that will do with sanitation.

In Finland (Lynch et al, 1997 as cited in Lynch & Kaplan, 2000) men in low paying jobs were the most disadvantaged in terms of material resources, job insecurity, experienced more work injuries. They also tended to smoke more, get drunk more often, eat less nutritious foods and have a hostile despairing attitude.

Those groups with the lowest disposable incomes are the most exposed to multiple stressors.

### Limitations

Studies that measure income at one point in time fail to capture health effects of sustained exposure of being in an income group or consider transitions in and out of income groups.

In the 45- 65 year group income reduces more steeply for those who do not have stable employment such as laborers.

Income is not the same as Wealth. Income affects access to resources but wealth is an accumulation of assets that also determines exposure to resources over and above income. Households with similar incomes may vary in terms of wealth and this is especially true for racial and ethnic groups or caste groups for India. For e.g. house ownership or membership in a club that is inherited or just inherited money as fixed deposits or shares. Liquid assets are more useful during hospitalization. Wealth is a buffer in an emergency.

Thus though many studies control for SES – this is a false effect as wealth is not being considered.

A **lifecourse** perspective that measures the cumulative effects from pre natal conditions and birth to infancy and childhood to adulthood and old age of exposures to harmful conditions and deprivations will be more effective in capturing the impact of SES. Lynch & Kaplan, 2000). Before birth intrauterine conditions involve maternal nutrition and exposure to toxins, during infancy and childhood, nutrition, access to healthcare & loving care are important for healthy development, during adulthood work environment (exposure to toxins, stress) and addictions (alcohol, tobacco) can lead to health problems and in old age wealth and access to good quality health care determine health outcomes .

### **Income Level of the Country**

Do the high income countries have better health indicators than the low income countries?

That is not always the case for often countries in the low and middle income category have better health indicators than the high income countries and is reflective of their health spending and policies. For eg Cuba and Costa Rica have high life expectancy and are ranked high in terms of health indicators being low income countries whereas the U.S. ranks lower among industrialized countries.

Cuba has a public health system with universal health coverage whereas the U.S. has privatized health care and health insurance is offered as part of job benefits however many people who work part time or for minimum wage do not get health insurance and do not qualify for medicaid (the coverage for the poor) they fall thru the cracks.

There are coefficients that reflect income equality for a country. One of them is the Gini coefficient which ranges from 0 indicating perfect equality to 1 indicating perfect inequality.

The Robin Hood Index can be interpreted as the proportion of aggregate income that must be redistributed from rich to poor households in order to maintain perfect equality.

The Robin Hood Index for India would be very high. The Robin Hood Index is more sensitive than the Gini coefficient and in a study by Kennedy et al (1996)(as cited in Kawachi, 2000) higher RHI was related to higher mortality including childhood mortality and homicide. In this study across the 50 US states a 1% increase in RHI was reflected in excess mortality of 21.7 deaths per 100,000. Thus even small reductions in inequality may have valuable public health outcomes. RHI has also been correlated with self reported health (Kawachi et al, 1997 as cited in Kawachi, 2000).

In a study of 44 countries over 6 time periods by Asafu Adjaye (2002) it was found that level of income, inequality and education all impacted health. Among low income countries income inequality had a greater effect because in low income countries the basics and access to health care get determined by income level whereas in the higher income countries the basics are provided for all. Also the level of savings were related to health status in low income countries – this highlights the lack of health coverage in these countries and private health care which swallows the savings.

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