Socio economic differential dimensions on health and education- A comparative study.

Dr. Nupur Chaurasia[1]
BPT, MPH , Amity Institute of Public Health, Amity University

Dr. Srishti Pathela[1]
BDS, MPH , Amity Institute of Public Health, Amity University

Abstract : *The aim of this paper was to find out the association between socio economic status and health of the individuals residing in Delhi. A descriptive cross sectional study was conducted in the month of May 2014 in five areas namely Trilokpuri, Sultanpuri, Seelampur, Seemapuri and Mangolpuri of Delhi. A total sample of 85 participants was conveniently selected from Medical mobile unit (MMU) of HelpAge India A semi structured questionnaire was developed and pilot study was conducted to validate the tool. A written consent from the respondents was taken. Kuppuswamy scale was used to calculate the socio economic status. Then the data was analyzed using SPSS and MS excel. Results are represented as frequency, percentage and Chi-square test. The study concluded that socio economic status and health as well as socio economic status and education has a statistically significant association (p<0.05).*

Key words: *Socioeconomic status, Health, education, Kuppuswamy scale*

I. INTRODUCTION

Economic progress of any country depends largely on human capital. Human capital is a major component which decides the socioeconomic background of an individual. Education plays a most viable method to develop the human capital (Javed et al, 2008). Socioeconomic status refers to where an individual stands in the social hierarchy structure. It is measured in terms of education, occupation and income (Glymour et al, 2013).

Socioeconomic status and education

The level of education has a strong association with the progress of any nation. The quality of education imparted contributes as a major factor for economic development and its sustainability. Among all phases of education, primary education plays a prominent part in the society. It not only helps in inculcating the basic values and principles but also playing a crucial role in improving the standard of living (Javed et al, 2008). Poverty forms a very strong link with education. The people below poverty line are 42% and 26% in urban and rural India respectively (Masthi Ramesh N.R et al, 2013). Due to poverty, major number of school dropouts has been reported. Although education can act as a very strong tool for these disadvantaged children to overcome their problems in regard to socio economic background so that it raises their self-esteem and they can confidently put themselves to the same shoes with others while entering the markets (Taylor et al). One of the tools for identifying this problem is to measure the socioeconomic status by using the SES scales. Modified kuppuswamy scale is used to measure the Socio economic status of an individual (Masthi Ramesh N.R et al,2013).

II. MODIFIED KUPPUSWAMY SCALE

Kuppuswamy's socio-economic status scale is used to measure socioeconomic status. This scale evaluate on the basis of education, occupation and income of the family to classify families into upper, middle and low socioeconomic status (vijaya K et al, 2013).

Category Score

A. Education
  Professors or honours - 7
  Graduate or post graduate – 6
  Intermediate or post high school diploma - 5

High school certificate - 4
Middle school certificate - 3
Primary school certificate - 2
Illiterate – 1

B. Occupation
  Profession - 10
    Semi-profession - 6
    Clerical, shop-owner, farmer - 5
    Skilled worker - 4
    Semi-skilled worker - 3
    Unskilled worker - 2
    Unemployed -1

C. Family income per month in Rs.(2013)
    (>34830) Rs - 12
    (17415 – 34829) Rs - 1 0
    (13029 – 17414) Rs - 6
    (8707 – 13028) Rs - 4
    (5224 – 8706) Rs - 3
    (1744 – 5223) Rs - 2
    (<1743) Rs – 1

D. Socio-economic class Total Score
    Upper (I): 26-29
    Middle Upper middle (II): 16-25
    Lower middle (III): 11-15
    Lower Upper lower (IV): 5-10
    Lower (V): <5   *(vijaya K et al, 2013).*

Socioeconomic status and health
   Socio economic status is considered as an important component of health, morbidity and mortality. It can significantly influence the affordability, acceptability and utilization of health services by the individual (Masthi Ramesh N.R et al, 2013). Health care is a need for every individual despite the fact to which race, religion and socioeconomic status they belong to. But here socioeconomic status plays a very dominant role as the people of lower socioeconomic status suffers from many obstacles to even get the access to primary health care services. Some of the hurdles faced by these people are unaffordability, discrimination by health care providers and the society (Olah. E Michelle et al, 2013). Some studies also suggest that a society comprises of both economically well off and the poor but the ones with better privileges enjoy the healthy life. Socioeconomic status has vast dimensions. The sound economic status is an essential ingredient that shape health disparities. SES can be measured through various parameters that can be operated by various mechanisms. For example the individual with higher level of income linked with better health and whereas lower status suffers poor health (Cutler Dm et al, 2008).
The work presented in this paper explores the relationship of two important variables i.e. health and education with SES. This study will facilitate to understand that which socioeconomic class individuals are more prone to diseases.

III.   METHODOLOGY
Participants
   A total sample of 85 participants was conveniently selected from Medical mobile unit (MMU) of HelpAge India in five areas namely Trilokpuri, Sultanpuri, Seelampur, Seemapuri and Mangolpuri of Delhi. Modified Kuppuswamy scale was used to analyze the socio economic status of the sample population. A semi structured questionnaire was prepared and it was pretested for its validity and reliability.

Procedure
   Convenient samples of individuals were taken. The procedure of the study was explained to every individual in their local language (Hindi). A written consent was taken from the participants. They were asked set of questions through personal interview via schedule in their local language (Hindi).The data collected was

then coded, scored, tabulated and scrutinize statistically using SPSS and MS EXCEL. The data analysis was done using frequency, percentage and Chi square test.

IV.   RESULT

This section deals with the study of "impact of socio economic status on the health". The sample is collected from five areas of Delhi.

Table 1 : Shows the socio-economic status of the samples

Socio economic class		Frequency	Percentage
Lower socio economic class	Lower	22	25.9%
	upper lower	50	58.8%
Middle socio economic class	lower middle	9	10.6%
	upper middle	4	4.7%
	Total	85	100%

On analysis it was found 84.70% of the total respondents sample belongs to lower socio economic class (lower and upper lower class), and 15.29% of individuals were from middle socio economic class (According to the Kuppusways scale of classification).

Table 2: Relationship between socio-economic status and education.

Socio economic status		**Education** Pearson chi square test Value 70.93, Df 15 & sig 0.00 (2-tailed)						Total
		Illiterate	$\leq 5^{th}$ class ($\leq$ primary)	$\leq 8^{th}$ class ($\leq$ middle)	$\leq 10^{th}$ class ($\leq$ higher)	$\leq 12^{th}$ class ($\leq$ senior secondary)	graduate/ postgraduate	
1.	Lower	21(95.45%)	1(4.55%)	0(0%)	0(0%)	0(0%)	0(0%)	22(100%)
2.	upper lower	24(48%)	3(6%)	19(38%)	4(8%)	0(0%)	0 (0%)	50(100%)
3.	lower middle	0(0%)	0(0%)	2(22.22%)	44(44.44%)	2(22.22%)	1(11.11%)	9(100%)
4.	upper middle	0(0%)	1(25%)	0(0%)	1(25%)	1(25%)	1(25%)	4(100%)
Total		45(52.94%)	5(5.88%)	21(24.71%)	9(10.59%)	3(3.53%)	2(2.35%)	85(100%)

On analysis it was found that maximum population of lower socio economic status (lower and upper lower) were illiterate while middle socio economic status (lower middle and upper middle) were educated.

Table 3: Shows relationship between socio-economic status and health

P<0.05 significant		past/present medical history Pearson chi square Value:29.55,df:12 & sig (2 tailed):003					
		no disease	1 disease	2 disease	3 disease	4 disease	Total
socio economic status	Lower Class (lower & upper lower)	1 (20%)	12(70.58%)	36 (92.30%)	16 (94.11%)	7(100%)	72 (84.70%)
	Middle Class (lower middle and upper middle)	4 (80%)	5 (29.41%)	3 (7.69%)	1 (5.88%)	0 (0%)	13 (15.29%)
Total		5(100%)	17(100%)	39(100%)	17(100%)	7(100%)	85(100%)

On analysis it was found lower class individuals were suffering from more number of diseases as compared to middle class.

V.   CONCLUSION

It was concluded that lower socio economic individuals were suffering from more number of diseases which reflects that lower socio economic status individuals are more prone to diseases and there is a statistical significance between socio economic status and disease ($p<0.05$). Also it was concluded that most of the population belonging to lower class were illiterate as compared to the middle socio economic class which were much more educated and there is a statistical significance relationship between education and socio economic status ($p<0.05$).

VI. LIMITATION

There were few limitation that has occurred during the study. Sample size was small and only Few Slums area of West and East Delhi was considered.

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