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Assessment on Physical Health Status of Adults Having Different Socio-Economic Condition in Assam State

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Abstract

Health of individuals varies in every different cities, countries and continents. Life style, infrastructure, emotional and social wellbeing are influential factors of an individual physical as well as mental health. It is very essential to have knowledge about one of the major domain of overall health i.e. physical health. The study was conducted to assess the overall physical health status in normal adult men of Assam state using SF-36 questionnaire. Visiting card, a consent form attached with the Kuppuswamy's socio-economic status questionnaire and SF-36 questionnaire were used to carry out this study and permission was taken from colleges, schools, offices, clubs etc. where ever it was required. Twenty five hundred normal individuals of aged 30-40 years belonging to five different socio-economic classes from various districts of Assam were taken as sample of the study. The result showed that the lower middle socio-economic class group had better in overall physical health than all other socio-economic class groups while lower socio-economic class group was poor in this regards.

Keywords: SF-36, socio-economic, multidimensional, UC, UMC, LMC, LUC, LC, PCS.

Introduction

Status of an individual health in a region is largely governed by the physical health infrastructure and the concerning services provided to the people. Health can be assessed in terms of positive indicators of health status or the total absence of physical health as well as mental health, reflected in disease specific death (mortality) rates. According to statistics of WHO, India is lagging much behind many countries of the world in health status. According to Annual Report, 2008 India got 112th position. This is no less true in the case of Assam state (Basumatari, 2016). The self-rated health responses are used as an indicator of an individual health status and these indicator measures individuals' perception of their overall health. (Khan & Flynn, 2016) completed a research work on the

self-reported health status of older adults in Malaysia and Singapore. Their study revealed that poorer health was more prevalent among people with lower education. A study results revealed that older employed adults had better health outcomes than unemployed older adults and a strong association existed between employment and health status in older adults beyond what can be explained by socioeconomic factors such as education, income (Kachan & Fleming, 2015). In a study by Ronika Agrawal and Charleen D'silva, it was found that the calculated mean of physical component summary (PCS) was 47.87 with SD ±8.17. There was hardly any distinguish between the physical component summary (PCS) score of overall Indian population and Assam state. Again, in the population of United States of America the physical component summary (PCS) mean value is 50 with SD ±10.

Method and Procedure

Sample of Respondents

To obtain required data, the investigators had selected twenty six hundred (N=2600) adult working men randomly and then categorized in to 500 samples in each socio-economic class as per socio-economic condition from five different divisions of Assam state. The age ranged between 30 to 40 years old. Incomplete questionnaires of respondents and over aged as well as below 30 years aged respondents were not taken as samples for this study. After having been informed regarding the objective and procedure of the study, all respondents took part in this study with their own interest.

Tool

The tools used in the present study were Kuppuswamy's socio-economic status scale and SF-36 Questionnaires. The used socio-economic status scale was updated by Dr. Nazia Tabassum and Dr. R.L. Lakshman Rao while SF-36 was used to assess health status and it was developed by John E. Ware,Jr.

Analysis of Data

The One way analysis of variance (ANOVA) was applied to find out whether any significance difference is there in overall physical health status among five different socio-economic categories. In the testing of two tailed hypothesis, the level of significance was set at 0.05.

Table 1:

Descriptive statistics of Physical Component Summary (PCS) measures

	No. of Sample	Mean	Std. Deviation	Std. Error	Minimum	Maximum
UC	500	43.33	5.92	.26	27.07	59.64
UMC	500	43.42	5.79	.26	22.15	61.72
LMC	500	44.56	5.76	.26	21.21	64.38
LUC	500	43.15	5.76	.26	26.79	58.07
LC	500	43.02	6.33	.28	25.90	64.72
Total	2500	43.50	5.94	.12	21.21	64.72

Table 2:

Analysis of variance on Physical Component Summary (PCS) measures among adult men of different socio-economic status groups

	df	Sum of Squares	Mean Square	F	Sig. (P-value)
Between Groups	4	761.67	190.42	5.44*	0.00
Within Groups	2495	87331.87	35.00		
Total	2499	88093.54			

Table 3:

Post hoc mean comparison on Physical Component Summary (PCS) measures among adult men of different socio-economic status groups

Socio-economic Class (I)	Mean (I)	Socio-economic Class (J)	Mean (J)	Mean Difference (I-J)	Std. Error	Sig.
UC	43.33	UMC	43.42	0.09	0.37	0.80
		LMC	44.56	1.24*	0.37	0.00
		LUC	43.15	0.18	0.37	0.64
		LC	43.02	0.31	0.37	0.41
UMC	43.42	LMC	44.56	1.14*	0.37	0.00
		LUC	43.15	0.27	0.37	0.47
		LC	43.02	0.41	0.37	0.28
LMC	44.56	LUC	43.15	1.41*	0.37	0.00
		LC	43.02	1.55*	0.37	0.00
LUC	43.15	LC	43.02	0.13	0.37	0.72

****. The mean difference was significant at the 0.05 level.***

Results and Discussion

Table-1 showed the descriptive statistics of the data on mean overall physical health status of adults in different socio-economic groups. Table 2 revealed that the F-value was significant at 5% level as the p value attached with the calculated F-value is 0.00 which was less than 0.05. Hence, the null hypothesis of no difference in the overall physical health status among the adults in all the five socio-economic groups was rejected. Therefore, LSD post hoc test was used to compare the means in different pairs. From Table-3 it was seen that amongst all the pair wise comparisons only the difference between overall physical health status of the adults in upper class and lower middle class, upper middle and lower middle class, lower middle class and lower upper class, lower middle class and lower class was significant at 5% level because the p-value for those mean differences was less than 0.05.

Based on statistical analysis and graphical representation evident from Table 1, Table 3 and Figure 1, it was inferred that the overall physical health status in the lower middle class adults was better than all other adults whereas overall physical health status was poor in lower socioeconomic class group. Further, overall physical health status was similar in adult men belonged to upper class and upper middle class group while the lower upper socio-economic class group was only better than lower socio-economic class group. The mean calculated for Physical component summary (PCS) is 43.50 and SD is ± 5.94 where as the United States of America population values for mean Physical component summary (PCS) is 50 and SD is ± 10. The scores are higher in comparison to those got by our survey study. On the basis of literature review it was found that with the advancement in the technology, many individuals having upper class socio-economic condition live a sedentary life. They avoiding participating in any sports and with the uses of elevators, they do not climb the stairs. But people belong to lower middle class neither get sedentary life as upper socio-economic classes nor get much govt. fund and facilities as provide to lower classes. Along with that lower middle class people mostly trying to avail a sedentary life in the next days to come. To achieve that they are often get involve in more physical activities that leads to have a better overall physical health.

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