Economic Status and Health in Old Age: A Sociological Study of Kolkata

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Abstract:
Economic status can have a significant impact on the health of individuals in old age. In general, people with higher socioeconomic status tend to have better health outcomes, including better physical health, lower rates of chronic diseases, and longer life expectancy. This article provides anthropometric data on senior citizens in India. Kolkata, West Bengal, was the location of the data collection. One hundred geriatric (males and females, aged 65 and older) participated in the study. The Body Mass Index (BMI) of elderly males and females was compared to their income status.
Keywords: Elderly, Kolkata, BMI (Body Mass Index), Economic Status

Introduction

Over the past several decades, the proportion of elderly individuals in the global population has steadily increased, according to global statistics. The United Nations Population Fund (UNFPA) and Help Age International estimate that by 2050, India's geriatric population will increase to 323 million, representing 20 percent of the country's total population. I This trend appears to be emerging in the majority of economically developed nations. It is believed that enormous advances in medical technologies and

health care delivery systems are the primary causes of this shift in the geriatric population. Diseases that were once believed to be fatalcan now be cured or, at the very least, life expectancy can be increased by a number of years. Today, people live longer than ever before.

Old age is the later years of existence, which are marked by a decline in physical capacities. This deterioration leads to alterations in the individual's active participation (generally, physically) in various aspects of life, role-playing and role performance, and the transition from economic independence to dependence. In traditional Indian culture, the elderly held positions of authority and prestige. In the pre- industrial agrarian Indian society, the majority of the elderly maintained their financial independence throughout their lives. In addition, the prevalent economic, political, and social value systems, which were founded on the maintenance of inherited inequality, allowed the elderly to hold leadership positions in the joint family, caste group, and village community (De Souza, 1982). ii This traditional system provided the elderly with social, economic, and emotional security. However, industrialization, urbanisation, and modernization have altered the values of traditional Indian society, leading to a shift in the function and status of the elderly. As a result of the gradual transformation of the family, community, and village's social structure, the knowledge and experience of the elderly are no longer regarded as significant. Economic hardships, health issues, family responsibilities, and strained (family) relationships are the most significant issues faced by the elderly. Due to the pressing demands of family and their own needs, they must labour for the rest of their lives. Health care facilities for the elderly have been a major concern. Regarding the availability and utilisation of these facilities, Desai (1987), in analysing the health situation of the rural elderly, notedthat "to reach a hospital or a doctor requires money, which the rural impoverished cannot afford. Therefore, the fate of the rural elderly is to suffer and perish without even thepossibility of a healing hand.

The occurrence of elder neglect, inconceivable in agrarian societies, has begun (Pillai, 1988). A number of factors contribute to the changing status of the elderly, with the dissolution ofthe joint family system being the most significant. Individualism and materialism are two other significant factors that are on the rise among today's youth.

In a study of the problems of the elderly and the need for social intervention in the states of Haryana and Himachal Pradesh, it was discovered that the elderly face numerous issues, such as inadequate accommodation and inadequate care and attention in their families. The majority of the elderly were pessimistic about a change in their current situation, and they didnot believe that family members, neighbours, or the elderly themselves could make a difference in this regard. The study found that the primary problems of the elderly are

economic hardships and physical sufferings due to loss of occupation and physical vitality, and in addition, the rural populace lacks basic amenities (Upadhyay, 1992).

According to a study conducted in Kerala, both professionals and the general public appear tobelieve that illness is a natural component of ageing and that the majority of illnessesaffecting the elderly have no cure but only palliatives (Nayar, 2000).

In his study, Health Status of the Rural Aged in Andhra Pradesh, Rao and others discovered that health issues tend to worsen with age and are frequently exacerbated by neglect, low socioeconomic status, social deprivation, and improper diet. A higher proportion of the total respondents (sample of 300 elderly) reported that they were afflicted with severe illness. Lackof medical facilities in the villages and poor economic conditions may account for thevillagers' poor health status (Rao and others, 2003).

In a 1989 study conducted by Braja Mohan Otta, he discovered that landless elderly endures more severe problems than landed elderly, including loss of authority, status, low income, problems of loneliness, and dissolution of the joint family. In addition, he discovered that a greater proportion of elderly landless individuals reduce their requirements and suffer from maladjustment.

Anthropometry is an essential instrument in geriatric nutritional assessment that is used to evaluate underweight and obesity, which are both significant risk factors for the development of serious diseases and disability in the elderly (Jensen & Rogers, 1998; Visser et al. 1998).

Anthropometric measurements used to evaluate the geriatric are typically simple to obtain, non-invasive, and inexpensive (Kuczmarski, Kuczmarski, & Najjar, 2000). The primary dimensions are weight, height, circumferences, and skin fissures (Menezes & Marrcui, 2005).Arm circumference can be used effectively to classify an individual's nutritional risk orstatus, and calf circumference has been cited as a sensitive indicator of lean mass loss in the elderly (WHO, 1997). The ageing process itself is accompanied by numerous physiological and nutritional changes, such as an increase in body weight and a decrease in height. Additionally, this results in a decrease in fat-free mass, which is strongly correlated with an increase in fat mass. In fact, the decrease or maintenance of body weight may conceal an increase in body fat mass due to ageing and the loss of muscle mass in humans. The assessment of lean body mass and body fat mass, as well as their relationship, is crucial for

individuals over the age of 60. Modifications in total or periphery muscle mass and adipose tissue can be an excellent indicator of the risk factors for a variety of diseases.

The accumulation of body fat typically occurs in the trunk and visceral regions. It is well- known that overweight and obesity are strongly associated with an increased risk of cardiovascular disease, as well as chronic disorders and disabilities (Musta, Spadano, Coakley, Field, Colditz, & Dietz, 1999). Body mass index and waist circumference have been utilised as indicators of obesity and adiposity for the purpose of examining their association with chronic diseases (Janssen, Katzmarzyk, & Ross, 2004).

Insulin resistance is caused by abdominal fat depots, which are indicated by the circumference of the waist. It was discovered that males with a waist circumference greater than 94 centimetres are at an increased risk, and those with a waist circumference greater than102 centimetres are at an extremely high risk, particularly for cardiovascular co morbidity.An increased risk of developing these complications was identified in females with a waist circumference greater than 80 cm, and a significantly increased risk in females with a waist circumference greater than 88 cm (WHO, 1997). There is no doubt that humanity would benefit greatly from a more in-depth examination of the final phase of existence. In fact, a paucity of data and the heterogeneity of the experimental design and measurement methods indicate the need for a meta-analysis. The need to define the present state of information regarding the relationship between body composition and ageing is reflected. This paper seeks to comprehend the relationship between Body Mass Index (BMI) and the economic status of the elderly.

Methodology

Sampling:

Participants for the research were purposively selected from the general public, old people's homes located in the metropolitan Kolkata area in West Bengal, India. Total 100 respondents were interviewed, 52 males and 48 females. All participants were of typical physical health and were active in life at the time of the measurements conducted for the study.

Data Analysis:

Using SPSS, the data were examined. The programme was initially used to verify the veracityof the entries by identifying outliers, and then for statistical analysis.

BMI_Category				
BMI Category	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Under Weight (<18.5)	6	6.0	6.0	6.0
Healthy Weight (18.5 - 24.9)	11	11.0	11.0	17.0
Overweight (25 - 29.9)	39	39.0	39.0	56.0
Obese Class I (30 - 34.9)	36	36.0	36.0	92.0
Obese Class II (35 - 39.9)	7	7.0	7.0	99.0
Obese Class III (>40)	1	1.0	1.0	100.0
Total	100	100.0	100.0	
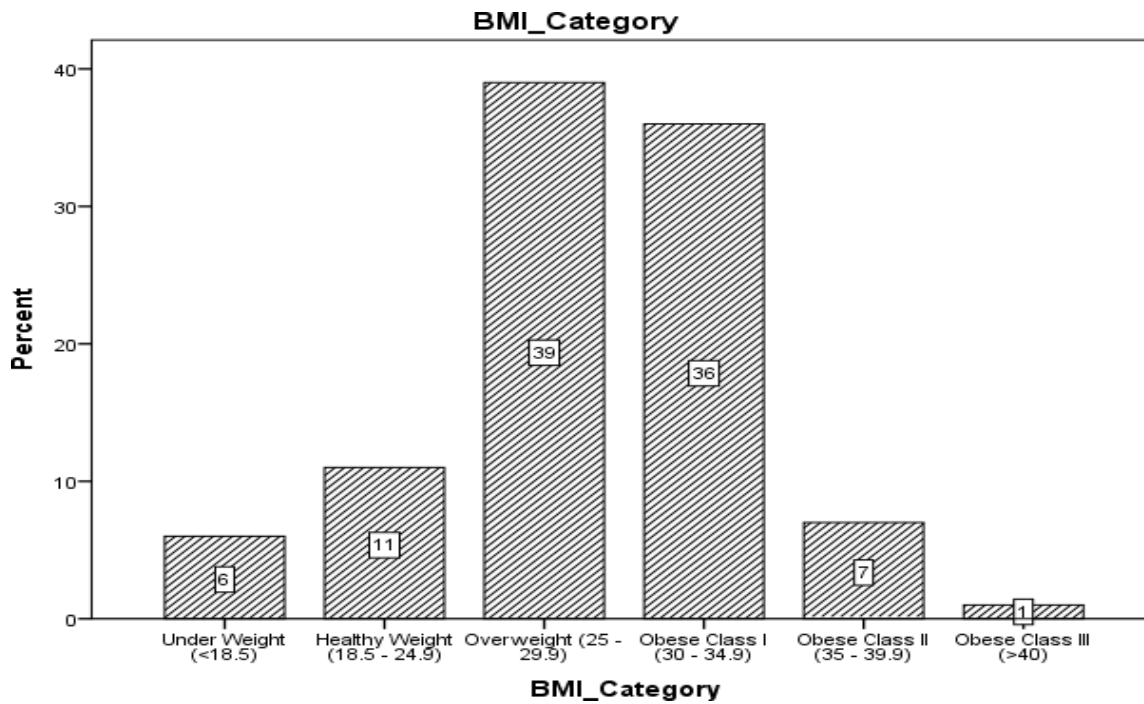
Table 1.1

INCOME_GROUP * BMI_Category Cross Tabulation

Income Group	BMI_Category						Total
	Under Weight (<18.5)	Healthy Weight (18.5 - 24.9)	Overweight (25 - 29.9)	Obese Class I (30 - 34.9)	Obese Class II (35 - 39.9)	Obese Class III (>40)	
Up to 5000	2	6	20	7	1	0	36
5001 to 10000	1	1	6	6	2	1	17
10001 to 15000	1	1	2	2	0	0	6
15001 to 20000	1	1	2	1	1	0	6
20001 to 25000	1	1	2	5	0	0	9
25001 to 30000	0	0	2	5	0	0	7
Above 30000	0	1	5	10	3	0	19
Total Total	6	11	39	36	7	1	100

Table 1.2

Income Group vs BMI
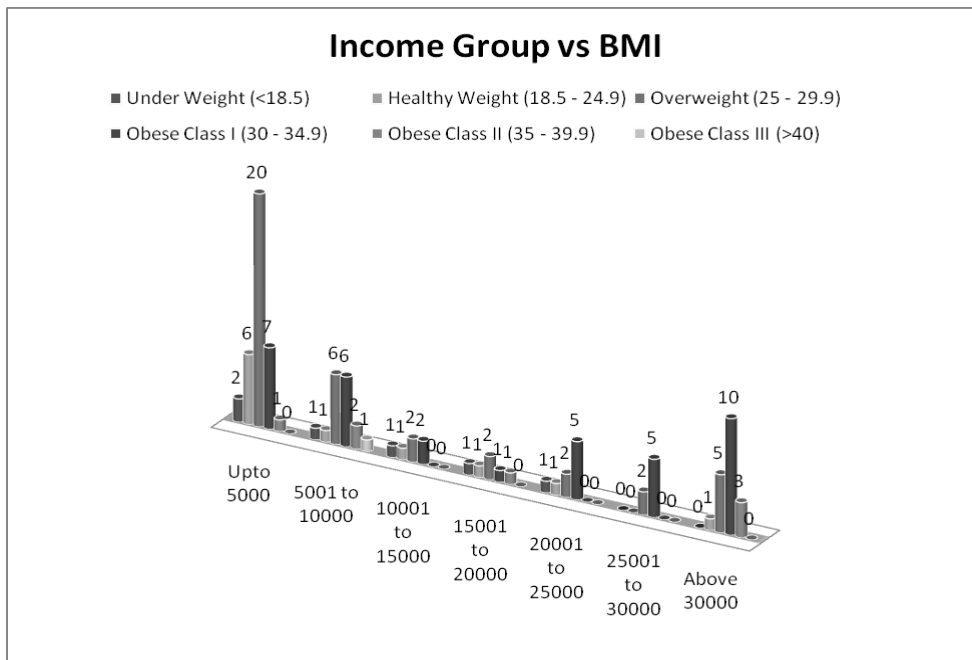
Age_Group * BMI_Category Crosstabulation

Age Group	BMI_Category						Total
	Under Weight (<18.5)	Healthy Weight (18.5 – 24.9)	Overweight (25 – 29.9)	Obese Class I (30 – 34.9)	Obese Class II (35 – 39.9)	Obese Class III (>40)	
Upto 65	4	7	21	20	5	1	58
66 to 70	0	2	6	7	1	0	16
71 to 75	0	0	8	6	0	0	14
76 to 80	2	2	2	2	0	0	8
Above 80	0	0	2	1	1	0	4
Total	6	11	39	36	7	1	100

Table 1.3
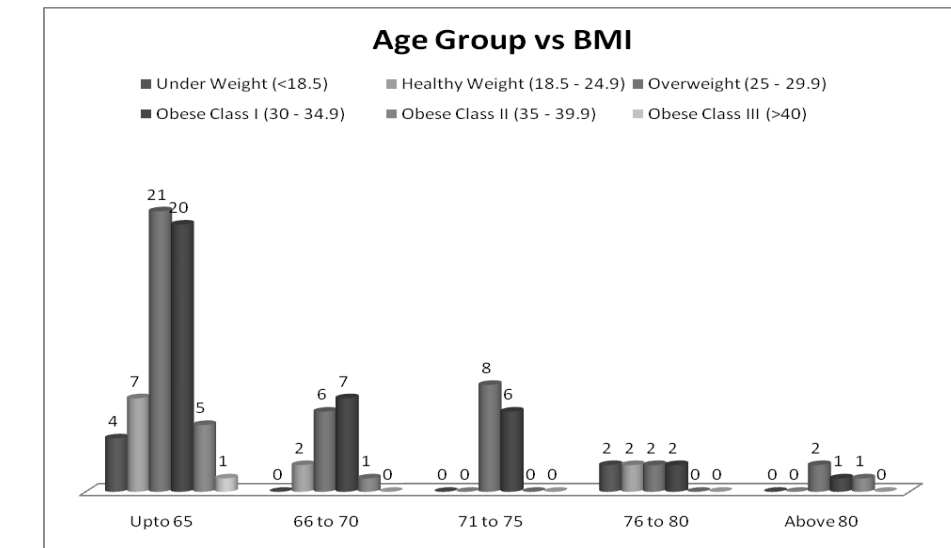
Results:

As observed by the effect of respondents' income on their BMI: Twenty individuals with incomes up to $5,000 were overweight, six were at a healthy weight, two were underweight, seven respondents were class one obese, and only one was class two obese. Whether 10respondents in the income group of $30,000 and above were obese in class one and seven were obese in class two, no one was under weight, only one respondent had a healthy BMI, and five were overweight. One respondent was under weight, one was healthy, six were in the overweight BMI class, six were in the obese BMI class, and two were in the obese class two category. In the 10001 to 15000, 15001 to 20000, 20001 to 25000, and 25001 to 30000 income brackets, the BMI for those who were underweight was 1, those who were at a healthy weight had a BMI of 2, and those who were obese had BMIs of 2, 1, and 5, while those in the class one obese category had BMIs of 2, 1, and 5.As observed the effect of age on BMI of the respondents: majority of them were overweight in the age group of 65, they were 21 innumbers, 20 were in class l obese, 5 were in class II obese, 1 was in class III obese, 4 were under weight and only 7 respondents were in healthy weight categories. In 66 to 70 age groups,6 respondents were overweight, 7 were in class l obese category, 1 was in class II obese, only 2 were in healthy weight category and nobody was in underweight category. In age groups 71 to 75, 8 respondents were in overweight category 6 were in class l obese category and nobody was in underweight, healthy and obese class III categories. In age group 76 to 80, 2 respondents were in underweight, 2 were in healthy, 2 were in overweight and 1 was in class I and II obese categories. In age group 80 and above, only 2 respondents were overweight and I was in class l and class II categories, nobody was in healthy, underweight and class III categories.

As observed, the BMI by gender consists of a total of 48 females and 52 males. There were five women in the underweight category, nine in the healthy weight category, twenty-eight in the overweight category, five each in the class l and class III obese categories, and no one in the class II obese category. The total number of men between the ages of 65 and 80 who were underweight was 1, healthy weight was 2, overweight was 11, class 1 obesity was 31, and class II obesity was 7.

Conclusions:

one reason for this association is that people with higher socioeconomic status are more likelyto have access to better healthcare, including preventive services, and are more likely to receive timely and appropriate treatment for illnesses. They also tend to have better living conditions, including access to nutritious food, safe housing, and environments that are conducive to good health.

Among elderly, being underweight is an outcome of great interest because it is associated with significant risks for mortality and morbidity (Corrada et al., 2006). So, we fail to detect any impact of income on the probability of being underweight.

Obesity is another risk factor for morbidity among the elderly (Heiat et al., 2001) and the researcher find no impact of income on BMI of the elderly people. Finally, the results provideno evidence that rising income was partly responsible for the recent rise in elderly BMI.

Conversely, people with lower socioeconomic status are at a greater risk of poor health outcomes, including higher rates of chronic diseases, such as diabetes, heart disease, and cancer.They are also more likely to experience functional limitations, disabilities, and cognitive impairment, which can further limit their ability to live independently. Economic status can alsoaffect mental health outcomes in old age. People with lower socioeconomic status are at a greater risk of depression and other mental health problems, which can further impact their physical health and quality of life.

In summary, economic status can have a significant impact on the health of individuals in old age, with those with higher socioeconomic status generally experiencing better health outcomes.Addressing disparities in economic status and improving access to healthcare and other resources can help promote better health outcomes for older adults. Instrumental variable estimates yield no evidence that income affects weight or the probability of being underweight, healthy weight, overweight, or obese among elderly. The strongest conclusions one can draw from our analysis that increase in income will not increase or decrease BMI among men and women.

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