

PHYSICAL HEALTH STATUS OF AGED WOMEN: A CASE STUDY OF SRINAGAR DISTRICT - J&K STATE

¹Prof. Neeru Sharma ²Farhat Masoodi

^{1&2}PG Department of Home Science University of Jammu, J&K, India

ABSTRACT

There is a growing concern both at government and non-governmental level about the present state of senior citizens with regard to their increasing numbers and deteriorating state of health on account of psycho social trauma. The present study was carried out among the aged women of District Srinagar of the state of Jammu & Kashmir, in order to assess their physical health status. A sample of 50 aged women of various urban wards of Srinagar district was selected by using random sampling technique. Anthropometric measurements (Height, Weight, Calf circumference, Demi span measurement, BMI) were assessed by using weighing machine & measuring tape. Statistical analysis was used with the help SPSS technique like mean, standard deviation, T- test and correlation was computed. Results reveal that mean height among 60-70years of age group was 146.77 ± 17.26 and 70-80years of age group was 144.27 ± 15.13 , Weight among 60-70years of age group was 59.60 ± 7.78 and 70-80years of age group was 54.56 ± 6.63 , Calf circumference among 60-70years of age group was 11.64 ± 1.52 and 70-80years of age group was 11.56 ± 1.58 , Demispan measurements among 60-70years of age group was 96.00 ± 4.08 , 70-80years of age group was 93.99 ± 2.90 , BMI among 60-70years of age group was 28.64 ± 7.16 and 70-0years of age group was 26.16 ± 5.67 , t value were non significant at the level of ($p \leq 0.05$), except weight and demispan measurements. Results also reveal that normal range of BMI and class I obese were found among 30% of aged women respectively. On the basis of the findings, it can be concluded that high prevalence of risk of malnutrition was detected among the aged women of Kashmir valley which was attributed to educational status besides the family conditions. The problems of malnutrition and health related diseases among such group of aged women further worsened who were living without any family and financial support. Over all it has been found that women also suffered from psychological stress due to ongoing strife and cross-border terrorism.

Key words: Physical Health, Health Status of Aged Women and Anthropometric Measurements.

INTRODUCTION:

Ageing of homosapiens has been a natural phenomenon as is true of all other living organisms on this earth. Process of growing old has been defined as the gradual biological impairment of normal function, probably as a result of changes made in cells (mitotic cells, such as fibroblasts and post-mitotic cells, such as neurons) and structural components (such as bone and

muscle). These changes would consequently have a direct impact on the functional ability of organs (such as heart, kidney and lungs), biological systems (such as the nervous, digestive and reproductive system) and ultimately the organisms as a whole (Burton, 2007). At present it is estimated that around 60 percent of the world's older population lives in less developed countries, which is estimated at 279 million. Bhavani (2009) study reveals that, By 2030, this proportion is projected to increase to 71 percent (690 million). Many less developed countries have or are now experiencing a significant downturn in natural population increase (birth minus deaths), similar to the decline that previously occurred in industrialized nations. Population in India is also graying fast because of progress made in the post independence era. The 60 plus population which was estimated 12 million in 1901, had gone up to 20 million in 1951, and further crossed 80 million mark in 2001. The projected 60+ population age is 146.1 million for 2025. According to the census of India's elderly population has already crossed 100 million mark during 2011. As per analysis of census data and projections, elderly population sex ratio is in favor of female elderly. As per the census 2011, whereas for total Indian population sex ratio is in favor of male population in ratio 940:1000, for elderly at (60+) population it's in favor of elderly women by 1022:1000. (Census of India 2011). Ageing among the women has not been a favorable disposition for them, especially of those who reside in the remote and hilly regions of the country. In context of the social and economic standing in the societal milieu, this strata invariably face deplorable societal treatment. Women's health needs and health care utilization patterns become more demanding as they age over the period of time. Their access to private or public health care system reflects in adequacy or otherwise of requirements. In-fact this leads to having a decisive impact on reproductive health in their younger years to an emergence of more chronic illnesses in the middle years subsequently resulting into higher rates of disability and physical limitations during the senior years. Even in normal course women are vulnerable to experience physical sufferings in comparison to men on physical and cognitive health aspects. Many women remain unaware of their heart disease risk, considering it is primarily "male" disease though it has been found that even younger women too have chronic health problems. By the time women reach their middle

years (45 to 64 years), 3 in 10 already suffer from high cholesterol and arthritis, and even 1 in 10 women of reproductive age (18 to 44 years) state to have arthritis, hypertension, high cholesterol, and asthma or other respiratory condition. This becomes more accentuated in case of low-income group women who on account of financial constraints do not receive receiving timely health services. 52 percent of poor women, along with other 38 percent who are on the verge poverty line, face acute shortage of health care facilities as they can not procure it from the open market, which further gets compounded by virtual absence of governmental support systems. (Marmot, 2002). Health problems of aging women become more problematic when they have menopause related skin changes in collagen synthesis and hair distribution causing decrease in skin elasticity and increased prominence of coarse facial hair. Loss of estrogen receptor stimulation in bladder leads to decreased muscle tone, which can extrabrates frequency and incontinence. Osteoporosis is also a common phenomena consequences of results in physiological changes of aging in women. It has been found that women's peak bone mass is maintained until their mid 30's thereafter gradual loss of bone density starts occurring . This further gets accelerated at menopause stage due to loss of estrogen, either via premenopausal oophorectomy (surgical removal of the ovaries) or at menopause, leading to an imbalance in bone remodeling thus decreasing bone mineral density. Risk of suffering dementia also increase as women age accompanied by depression. Branch, 2007).

OBJECTIVES

The study was taken with broad objectives to asses the following issues:

- Assessing present health status of aged women belonging to middle SES families from Srinagar District.
- Analyzing the association of age and qualification with physical health status of aged women.

Research Design: An empirical field investigation with the support of a structured questionnaire and anthropometric instruments was conducted among the sample respondents living in urban

agglomerations of Srinagar city (J&K State) . The criteria included only such women who were in the age group of 60+years and who were not employed in any organized or unorganized sector and had not means of earning an income

Multistage sampling technique was used for selecting the sample. The list of urban areas of Srinagar city was obtained from the local municipal offices. Random selection of locations in the Srinagar city areas was done. The sample, fulfilling the criteria for the present study was selected till the required sample was obtained. Anthropometric measurements were used for the sample, Weighing machine,& measuring tape were also used. Both qualitative and quantitative methods were employed for data analysis. An appropriate statistical technique was used where ever applicable with the help of SPSS software, Mean scores, Stand -Deviation, correlation and T-test were computed for significant data.

RESULTS AND DISCUSSION:

Table No 1: Showing the distribution of aged women according to education.

<i>Age in years</i> Education	60-70 (n=25)		70-80 (n=25)		Total (n=50)	
	F	%	F	%	F	%
Illiterate	2	8.0	4	16.0	6	12.0
Middle class	1	4.0	3	12.0	4	8.0
Secondary class	5	20.0	8	32.0	13	26.0
Hr.secondry class	6	24.0	4	16.0	10	20.0
Graduation	6	24.0	4	16.0	10	20.0
Above Graduation	5	20.0	2	8.0	7	14.0

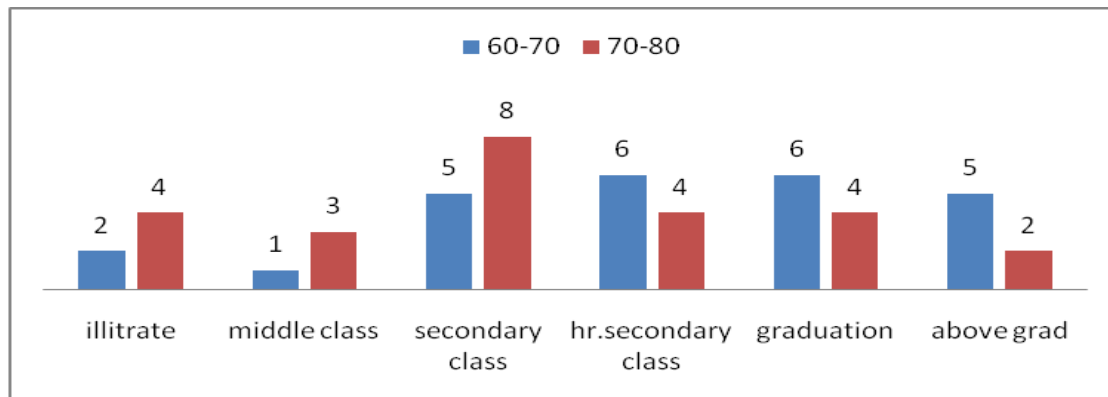


Fig No: 1:-Showing figurative presentation of data in Tab No:-1

Table NO: 1, Describes the educational qualification of the sample. Most of the women in the age group of 60-70years were either graduates 24% or had passed the higher secondary 24% and 20% were educated above graduation. Rest 70-80 years of age group were 16% educated higher secondary class and graduation 16% and 32% were educated secondary class. 16% were illiterates, and 12% were educated in middle class. Rests 8% were educated above graduation.

Table No 2: Anthropometric measurements of the respondents.

Anthropometric measurements	Age in years				‘t’ value
	60-70 yrs. (N=25)		70-80 yrs. (N=25)		
	\bar{X}	\square	\bar{X}	\square	
Height (cms)	146.77	17.26	144.27	15.13	1.19
Weight (Kgs)	59.60	7.78	54.56	6.63	2.63*
Calf circumference (cms)	11.64	1.52	11.56	1.58	0.18
Demi-span measurement (cms)	96.00	4.08	93.99	2.90	2.08*
BMI	28.64	7.14	26.16	5.67	1.35

*Significant at the level of ($p \leq 0.05$).

Anthropometric measurements like Height, Weight, Calf circumference, Arm spans (demi span) and BMI were measured. The table reveals that the mean height in (cms) among women in the age group of 60-70years was 146.77 ± 17.26 and among these in the age group of 70-80 years was 144.27 ± 15.13 . The mean weight in (kgs) among aged women in the age group of 60-70years was 59.60 ± 7.77 and among these in the age group of 70-80years was 54.56 ± 6.63 . Calf circumference

in (cms) among women in the age group of 60-70years of age group was 11.64 ± 1.52 and among these in the age group of 70-80years was 11.56 ± 1.58 . Demi span measurement in (cms) among women in the age group of 60-70years was 96.0 ± 4.08 and among these in the age group of 70-80 years was $93.9 \pm 11.2.90$ and BMI among women in the age group of 60-70years was 28.64 ± 7.14 and among these in the age group of 70-80years was 26.16 ± 5.67 respectively. In all the dimensions of anthropometric measurements except Weight and demi span(measurements). There were significant difference found on the dimension of Weight ($t=2.63^*$) and demi span measurements(2.08^*) indicating that with age weight and demi span decreases. Thus other t-values indicates that these measurements were non significant at the level of (0.05) respectively.

Table No: 2.1:-Shows the BMI among aged women to compare with WHO/NIN STANDARDS.

Classification/ Risk of other obesity related medical complications	WHO/NIN STANDARD NORMS OF BMI	BMI OF THE RESPONDENTS (N=50)	
		F	%
Underweight	<18.5	3	6%
Normal range (Average)	18.5-24.9	15	30
Overweight (Mildly increased)	25.0-29.9	11	22%
Obese Class I (Moderate)	>30.0 30.0-34.9	15	30%
Class II (Severe)	35.0-39.9	4	8%
Class III(Very severe)	>40.0	2	4%

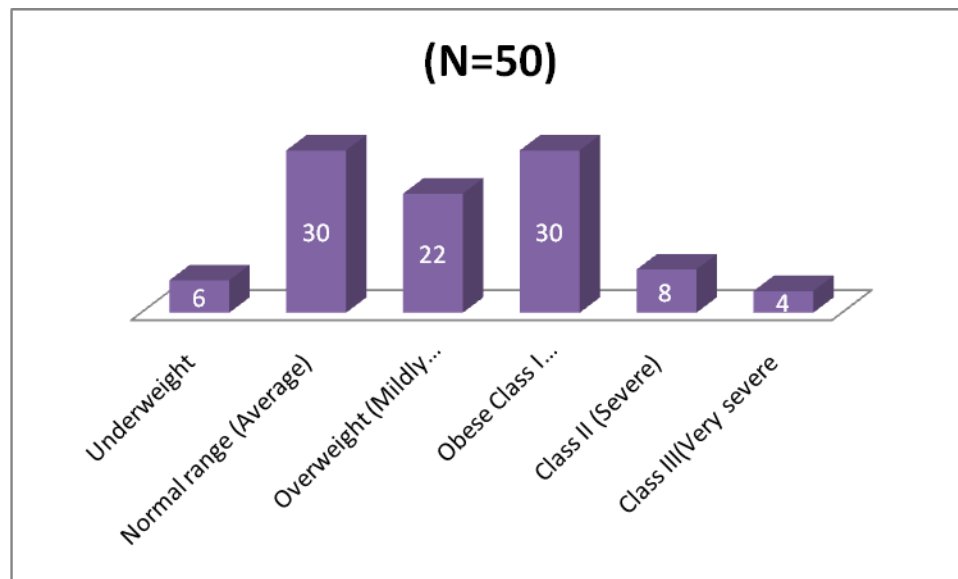


Fig No: 2:-Showing figurative presentation of data in Tab No:-2.1

The table reveals that 30% of aged women were normal range of BMI and class I of obesity, were as 22% of aged women were over weight, 8% of aged women were class ii obesity and obese, 6% of aged women were under weight and rest 4% of aged women were class iii obese.

Table No: .2.1: Relationship among anthropometric measurements and age of the respondents.

ANTHROPOMETRIC MEASUREMENTS	AGE	HEIGHT (cms)	WEIGHT (kgs)	CALF CIRCUMFERENCE (cms)	DEMI SPAN MEASUREMENTS (cms)
Height(cms)	-.170				
Weight(kgs)	-.356*	-.255			
Calf circumference(cms)	-.026	-.030	-.002		
Demispan measurements(cms)	-.278	.434**	.091	-.153	
BMI	-.193	-.646**	.354*	-.024	-.306*

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed)

Table No: 2.1, The result revealed that there is negative significant correlation between the weight and age among aged women were ($-.356^*$), Demispan and height were found positively correlated ($.434^{**}$) BMI and Height were found negative significant correlation ($-.646^{**}$). BMI and weight were ($.354^*$), BMI and demispan measurement were ($-.306^*$) respectively. Hence the table shows that anthropometric measurements of sample women has relationship with age.

CONCLUSION:

A healthy life style reflects a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity. The present research study is empirical in nature. The scope of the study extends to the District Srinagar where physical health status of 60+ age group of women living in the Srinagar city of Kashmir valley was studied 50 women were selected using random sampling technique. The tools used for the collection was, measuring tape, weighing machine and interview schedule. The data was analyzed both qualitatively and quantitatively. On the basis of anthropometric measurements, dietary intake among majority of aged women was found to be below than normal requirements and also with weight age decreases (support with studies). In a similar anthropometric measurements study Hirani et al (2001) found that weight and height was related to height and weight which were important measurements used in the calculation of body mass index (BMI), an indicator of nutritional status. The present study also indicates that there could be a strong possibility of weight and height loss attributable to ageing on account of thinning of discs of the spinal column and diminution in the height of the vertebrae. In another study carried by Dolores et al (2003) also confirms in to the findings of the present study on the basis of a cross sectional study of 89 older women (age range, 72-98 years) using MNA test for detecting nutritional risk. In this study the nutritional assessment also included anthropometric measurements (body mass index, triceps and sub scapular skin fold thicknesses, and mid arm and calf circumferences), quantification of dietary intake (7-days weighed food records), clinical and functional evaluations, and biological markers. These results revealed that 7.9% ($n=5$) of the older women were malnourished, 61.8 % ($n=56$) were at risk of malnutrition, and remaining 30.3 % ($n=28$) were well nourished. According

to the BMI, It is only one of several assessment used to determine health risk related to being under weight, overweight or obese. Present study concludes that about 30% respondents were normal range of BMI & class I obesity, and 22% were over weight and obese, 8% were obese and class ii BMI, 6% were under weight, and rest 4% were class iii BMI respectively. On the basis of present findings it can be concluded that prevalence of risk factors was detected among the aged women of Kashmir valley which was attributed to educational status besides the family conditions. The problems of malnutrition and health related diseases among such group of aged women further worsened who were living without any family and financial support. In the over all scenario women also suffered from psychological stress due to ongoing strife and cross-boarder terrorism.

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(In Special Consultative Status with the ECOSOC at United Nations since 2011)
M-8A, Lajpat Nagar-II, New Delhi-110024, India, Ph.: +91-11-29836486, 29840484
e-mail : agewellfoundation@gmail.com Website: www.agewellfoundation.org.