

A Study on Prevailing Malnourishment Among Elderly Population of Lucknow City

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Abstract

The elderly constitute about 7% of total population of India which is likely to increase to 10% by 2016. Like every other period in the life span, old age is characterized by certain physical and psychological changes. The elderly population is extremely diverse, ranging from fit, active and healthy octogenarians to extremely frail, totally dependent people with chronic diseases and severe disabilities. Malnutrition is not an inevitable side effect of ageing but many physiological, psychological and social changes associated with ageing can give rise to malnutrition. To study the prevalence and reasons of malnutrition, this study was conducted in Lucknow city. The number of respondents was 480. They were randomly selected from various old age homes and community. For anthropometric measurements, their weight and height was taken and then BMI was calculated. Structured questionnaires suggested by Indian Council of Medical Research were given to respondents for collecting data regarding their cognitive abilities. The result of study was that malnutrition is more prevalent in males as compared to females. Those who are living alone without support are more prone to malnourishment than those living with families. The main reasons of malnutrition at old age were seclusion and isolation along with chronic diseases.

Keywords: elderly population, malnutrition. Cognitive abilities, seclusion

1. Introduction

The ageing process is a biological reality which has its own dynamic, largely beyond human control. However, it is also subject to the constructions by which each society

make sense of old age. Aging is presumed to be process starting from infancy and continuing until death. On the other hand, being elderly is an unpreventable process that has biological, chronological and social aspects and problems. Aging is a multidimensional change involving the physical, psychological as well as social aspects for an individual. It can be described as a progressive deterioration of the physical and mental functions resulting in a simultaneous decline in both the capacity of the body to maintain homeostatic balance as well as the adaptability of the individual to various stressors thereby consequently increasing the chances of illness and mortality. Many changes occur as people enter old age and these changes decrease quality of life.

Malnutrition can be defined as the state of being poorly nourished. It may be caused by the lack of one or more nutrients (under nutrition), or an excess of nutrients (over nutrition). In the ageing and sick population, malnutrition is an important problem that has been seen in hospitals, residential care and in the community. Malnutrition is not an inevitable side effect of ageing, but many changes associated with the process of ageing can promote malnutrition. For example, ageing is frequently associated with decreases in taste acuity and smell, deteriorating dental health, and decreases in physical activity, which may all affect nutrient intake. Any change in nutrient intake can lead to malnutrition with its potentially serious consequences.

2. Objectives of Study

The main objective of the dissertation was to find out the prevalence of malnutrition in elder people. Other main objectives are as follows:

1. To know the extent of malnutrition in elder population.
2. To find out its reasons in elderly people.
3. To assess nutritional status and know the percentage of elderly population having problems related to malnutrition.
4. To assess physical and psychological changes and its effect on ability and mobility of elderly people.
5. To assess declined cognitive ability during old age.
6. To know the reasons of psychological stress.
7. To detect the causes of their problems keeping social, physical and economical factors in mind.

3. Methodology

- Lucknow city is selected as locale of study.
- Total 480 elderly people were selected for the study.
- Old age homes, communities and hospitals were covered during the study.
- The primary data is collected through designed questionnaire. The information regarding the socio-economic factors like age, occupation, income, family

size, family type, marital status, weight, height, nutritional status, psychological status, economical status, their problems and needs etc. were collected from purposively selected elder people from community and old age homes.

- The data collected were presented in tabular form to facilitate easy comparisons. The data was summarized with the help of statistical tools.

4. Results

One hundred twenty elderly people 61.67% men and 38.33% females were participated in the study. 48.33% were identified as well nourished and 51.67% were malnourished according to Anthropometry measurements. The main finding of this study is the prevalence of malnutrition in elderly people residing in Lucknow city. The other findings of this study are as follows:-

1. 43.24% males were healthy whereas 56.76% were malnourished in elderly male population. In elderly female population, 56.52% were identified as healthy and 43.48% were malnourished. It means the percentage of malnourished males is higher than females.
2. Body Mass Index of respondents was calculated. BMI of 51.66% elderly people was not within normal range. Prevalence of under nutrition as per BMI ($<18.5 \text{ kg/m}^2$ of height) was found in 16 people (13.33%) with 10 males (62.50%) and 6 females (32.50%). Prevalence of over nutrition (BMI >25) was found in 46 (38.33%) of respondents out of total 120 with 32 males (69.57%) and 14 (30.43%) of male respondents. Only 48.33% elderly people had BMI within normal range. Elderly females are much healthy than elderly males.
3. When ideal body weight (IBW) for height was applied for detection of under nutrition (IBW $<85\%$), it was documented in as many as 104 respondents (86.67%). So IBW is for height is more sensitive than BMI for detection of under nutrition. Only 13.33% respondents had Ideal Body Weight.
4. The mental ability of elderly people decreases due to ageing. About 31.67% respondents had good mental ability, 48.33% had average mental ability and 20% had poor mental ability.
3. When elderly people were asked about balanced diet, 51.67% elderly were said YES and 48.33% said NO. And among them 36.67% subjects had balanced diet and 63.33% were not.
4. Due to ageing, elderly people usually have digestive problems like gastric problems, piles, constipation etc. In 120 respondents, 46.67% subjects were suffering from digestive problems and 53.33% were not.
5. Chewing/swallowing difficulties are common in old age. In this study, it was found that 33.33% respondents were facing these problems while eating, whereas 66.67% were not.
6. Obesity, weight loss, Anemia, high/low Blood Pressure, Diabetes are some common nutritional problems elderly people usually face. 65% respondents had nutritional problems and 35% were not.

7. According to the mode of feeding, 16.67% elderly people need assistance while 83.33% subjects were able to self fed. 12. 53.33% respondents were taking solid food, whereas 30% were taking semi-solid food. And 16.67% were taking both type of food.
8. Elderly people felt secluded and isolated after retirement. This can cause them psychological stress. 45% subjects were going through from psychological stress and 55% were not but some of them felt alone due to death of their spouse and some due to living alone.

5. Conclusion

The study indicates that malnutrition is more prevalent in males compare to females. Those who living alone and no one to support, they are more prone to malnourishment than those who are living with their families. Low food consumption as well as poor appetite and chewing/swallowing problems are associated with the development of malnutrition. Due to poor dentition they can not eat food properly and this lead to poor nutrition causes malnourishment.

Obesity, weight loss, anemia, high/low blood pressure are some common nutritional problems elderly people usually face. Most of the females were obese than males. Digestive problems like constipation, gastric problems, acidity and piles are common in old age. The burden of disease in this population is clear, and this influences the nutritional status of this population. Wasting is an involuntary loss of weight which is primarily caused by inadequate dietary intake. This may be attributable to both disease and psychosocial factors. Energy intake was less in those living alone when compared with those living with others. Ageing is frequently associated with decreases in taste acuity and smell, deteriorating dental health, and decreases in physical activity, which may all affect nutrient intake. Any change in nutrient intake can lead to malnutrition with its potentially serious consequences. Old people are prone to fractures due to loss of calcium. Osteoporosis and arthritis are the main problems they suffer from.

Due to physical changes old people need a helping hand in their routine work. Physical changes and declined mental ability cause them psychological stress. Isolation and seclusion are caused by retirement, death of spouse, left by children in old age home or forced to live alone, no family support. These factors play an important role in causing psychological stress in old people. In community, most of males feel isolation and seclusion after retirement, but females keep themselves busy in household work. So the psychological problems are found most in males in community.

6. Helping A Depressed Senior

Tips for helping a depressed elderly friend or relative:**Invite your loved one out.** Depression is less likely when people's bodies and minds remain active. Suggest

activities to do together that your loved one used to enjoy: walks, an art class, a trip to the museum or the movies—anything that provides mental or physical stimulation.

- **Schedule regular social activities.** Group outings, visits from friends and family members, or trips to the local senior or community center can help combat isolation and loneliness. Be gently insistent if your plans are refused: depressed people often feel better when they're around others.
- **Plan and prepare healthy meals.** A poor diet can make depression worse, so make sure your loved one is eating right, with plenty of fruit, vegetables, whole grains, and some protein at every meal.
- **Encourage the person to follow through with treatment.** Depression usually recurs when treatment is stopped too soon, so help your loved one keep up with his or her treatment plan. If it isn't helping, look into other medications and therapies.
- **Make sure all medications are taken as instructed.** Remind the person to obey doctor's orders about the use of alcohol while on medication. Help them remember when to take their dose.
- **Watch for suicide warning signs.** Seek immediate professional help if you suspect that your loved one is thinking about suicide.

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