

Prevalence of Malnutrition among Geriatric Population

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Abstract

Worldwide, malnutrition is a major problem. Children, Pregnant mothers and Elderly are vulnerable to malnutrition due to physiological and functional changes. The intervention programs are directed towards children and pregnant mothers and often elderly people are neglected. But there has been a substantial rise in elderly population globally. The physiological changes of ageing like limited mobility, sensory impairment negatively affects the nutritional status. *Methodology:* A cross sectional descriptive survey method was used. A total number of 60 samples were selected by using purposive sampling technique and the data were collected by using Mini Nutritional Status Assessment (MNA) tool. *Results:* Out of 60 subjects, majority(68.4%) of them in the age group of 60-74 years, 70% of them were females, most of them were not educated and not working. Majority 49 (81.7%) of the geriatric were at the risk of malnutrition, 10 (19.7%) had malnutrition and only one in normal nutritional status. there was an significant association (p -value <0.05) between the level of nutritional status of geriatric population with comorbid condition as arthritis. *Conclusion:* The study revealed that the risk of malnutrition was high among geriatric people. As aging process increase immunity decrease and intake of food decrease hence they are at risk of getting malnutrition. The proper care and nutrition should be provided to geriatric people at their rest of their life. The government welfare measures should to reach every geriatric people. As a community health nurse should educate the family members and the community to give importance for geriatric people.

Keywords: Malnutrition; Geriatric people.

Introduction

Malnutrition is a major problem worldwide. Children, Pregnant mothers and Elderly are vulnerable to malnutrition due to their physiological and functional changes. Mostly the intervention programs are directed towards children and pregnant mothers and often elderly people are neglected. But there has been a substantial rise in elderly population globally. The physiological

changes of ageing like limited mobility, sensory impairment negatively affects the nutritional status.¹ In contrast to younger age group, the energy needs decreases with age but the need of nutrients remains the same which further increases the risk of malnutrition among elderly.²

In India, the elderly (aged 60 years and above) constitute 7.7% of the total population of 1.04 billion and this number is increasing. The majority of the elderly population lives in rural India.

With national health policy focusing on maternal health, child health and communicable diseases, the health status of the elderly has an urgent need. Since nutrition of the elderly affects immunity and functional ability, it is an important component of elderly care that warrants further attention.^{3,4}

The few studies that have been done show that more than 50 % of the older population is underweight and more than 90 % has an energy intake below the recommended allowance. Malnutrition is determined in a variety of ways, including comparison of dietary intake records with nutritional recommendations for healthy elderly, history, and physical assessment, including degree of weight loss over time and biochemical status.³

Statement of the Problem

'A study to assess the prevalence of malnutrition among Geriatric People residing in selected areas at Puducherry'.

Objectives

- To assess the prevalence of malnutrition among geriatric people
- To find out the association between malnutrition among geriatric people with their selected demographic variables

Materials and Methods

A quantitative descriptive survey approach was undertaken to assess the prevalence of malnutrition among geriatric people. A total of 60 Geriatric people were selected by using non- probability purposive sampling technique. A mini nutritional status assessment (MNA) tool was used to measure the degree of malnutrition and their co-morbid conditions was assessed.

Results and Discussion

Out of 60 subjects, majority (68.4%) of them in the age group of 60-74 years, 70% of them were females, most of them were not educated and not working. Majority 49 (81.7%) of the geriatric were at the risk of malnutrition, 10 (19.7%) had malnutrition and only one in normal nutritional status. there was an significant association (p -value < 0.05) between the level of nutritional status of geriatric population with comorbid condition as arthritis.

Table 1 revealed that out of 60 subjects, majority (68.4%) of them in the age group of 60-74 years, 70% of them were females, most of them were not educated and not working.

Table 1: Frequency and percentage distribution of demographic variables

Demographic variables	Frequency (f)	Percentage (%)
Age		
60-74 years	41	68.4
75-84 years	17	28.3
Above 85 years	2	3.3
Gender		
Male	18	30.0
Female	42	70.0
Education		
Illiterate	31	51.7
Primary education	14	23.3
Secondary education	12	20.0
Degree	3	5.0
Occupation		
Working	11	18.3
Non- working	49	81.7
Type of family		
Nuclear family	31	51.7
Joint family	29	48.3
Socio- economic status		
Upper class	1	1.7
Upper middle class	9	15.0
Lower middle class	22	36.7
Lower class	28	46.7

(Contd.)

Demographic variables	Frequency (f)	Percentage (%)
Number of family members		
1	5	8.3
2	21	35.0
4	12	20.0
More than 4	22	36.0

Table 2 revealed that out of 60 samples, majority 49 (81.7%) of the geriatric were at the risk of malnutrition, 10 (19.7%) had malnutrition and only one in normal nutritional status.

Table 2: Frequency and percentage distribution of nutritional status among geriatric people

N = 60

Nutritional status	Frequency (n)	Percentage (%)
Normal nutritional status	1	1.7
At risk of malnutrition	49	81.7
Malnutrition	10	16.7

Table 3 showed that there was an significant association (p -value < 0.05) between the level of nutritional status of geriatric population with comorbid condition as arthritis.

Table 3: Association between the level of nutritional status among geriatric people with selected demographic variables

N = 60

Demographic variables	Normal nutritional status		At risk of malnutrition		Malnutrition		Chi-square value
	N	%	N	%	N	%	
Age							
60-74 years	0	0.00	33	55.0	8	13.4	3.397 df = 4 $p = 0.494$ NS
13-15 years	1	1.7	14	23.3	2	3.3	
16-18 years	0	0.0	2	3.3	0	0.0	
Gender							4.402 df = 2 $p = 0.111$ NS
Male	1	1.7	16	26.6	1	1.7	
Female	0	0.0	33	55.0	9	15	
Education							1.607 df = 6 $p = 0.952$ NS
Illiterate	1	1.7	25	41.7	5	8.3	
Primary education	0	0.0	12	20.0	2	3.3	
Higher secondary	0	0.0	10	16.7	2	3.3	
Degree	0	0.0	2	3.3	1	1.7	
Occupation							3.024 df = 2 $p = 0.220$ NS
Not working	1	1.7	38	63.3	10	16.7	
Working	0	0.0	11	18.3	0	0.0	
Type of family							2.557 df = 2 $p = 0.279$ NS
Nuclear family	0	0.0	24	40.0	7	11.6	
Joint family	1	1.7	25	41.7	3	5.0	
Socio economic status							10.863 df = 6 $p = 0.093$ NS
Upper class	0	0.0	0	0.0	1	1.7	
Upper middle class	0	0.0	8	13.3	1	1.7	
Lower middle class	1	1.7	15	25	6	10	
Lower class	0	0.0	26	43.3	2	3.3	
Number of family members							9.152 df = 6 $p = 0.165$ NS
One	0	0.0	4	6.7	1	1.7	
Two	0	0.0	14	23.3	7	11.6	
Four	0	0.0	12	20.0	0	0.0	
More than four	1	1.7	19	31.7	2	3.3	

(Contd.)

Demographic variables	Normal nutritional status		At risk of malnutrition		Malnutrition		Chi-square value
	N	%	N	%	N	%	
Comorbid condition: diabetes							1.555 df = 2
Yes	1	1.7	31	51.6	8	13.3	$p = 0.460$ NS
No	0	0.0	18	30.0	2	3.3	
Comorbid condition: hypertension							1.555 df = 2
Yes	1	1.7	31	51.6	8	13.3	$p = 0.460$ NS
No	0	0.0	18	30.0	2	3.3	
Comorbid condition: arthritis							6.137 df = 2
Yes	1	1.7	34	56.8	3	5	$p = 0.04^*$ NS
No	0	0.0	15	25.0	7	11.8	
Comorbid condition: tuberculosis							3.726 df = 2
Yes	0	0.0	13	21.6	0	0.0	$p = 0.155$ NS
No	1	1.7	36	60.0	10	16.7	
No	0	0.0	0				

Significant at $*p < 0.05$ level.

Conclusion

The investigator conclude from the study that the risk of malnutrition was high among geriatric people. The proper care and nutrition should be provided to geriatric people at their rest of their life. The government welfare measures should to reach every geriatric people. As a community health nurse should educate the family members and the community to give importance for geriatric people.

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