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Effectiveness of structured teaching programme on knowledge regarding home care management of osteoarthritis among elderly in selected rural areas, at Medchal, Telangana

[1]Dr. R Sharmila and [2]M Rathnamala

[1]Ph.D., Department of Obstetrics and Gynaecology. Professor Cum Principal at CMR College of nursing, Kandlakoya, Medchal, Telangana, India

[2]Lecturer, Prathima College of Nursing, Telangana, India

Corresponding Author: Dr. R Sharmila

Abstract

Osteoarthritis condition that mainly affects older adults. Osteoarthritis is a preventable and treatable joint disease. People with osteoarthritis must work hard to move, which can lead to inability to walk. The joint problems tend to get gradually worse over time and can limit your normal activities, although treatment can help keep the condition under control. Osteoarthritis is the leading cause of morbidity and mortality worldwide, and by 2020, it will be the second leading cause of mortality.

Objectives: Assess the level of knowledge regarding home care management of osteoarthritis before and after structured teaching programme among elderly. Determine the effectiveness of structured teaching programme on knowledge regarding home care management of osteoarthritis among elderly. Find out the association of the post-test knowledge regarding home care management of osteoarthritis among elderly with their selected demographic variables.

Materials and Methods: Quantitative research approach was used for the present study. It helps to explain the effect of the independent variables on the dependent variables, Pre-experimental (one group pre-test, post-test) design was used for present study. The sample size was 30 elderly. Demographic variables and the level of knowledge among elderly concerning osteoarthritis were collected by using structured questionnaire.

Results: The pre-test 63.33% had below knowledge and 36.67% had average knowledge and none of them had above knowledge score, whereas post-test none of them had below average knowledge, 40% had average knowledge and 60% had above average knowledge score.

Conclusion: The findings revealed that knowledge about home care management of osteoarthritis among elderly was below average and average before structured teaching programme where as the knowledge of osteoarthritis elderly was average and above average after awareness programme improved the knowledge of elderly regarding osteoarthritis.

Keywords: Osteoarthritis, elderly, teaching programme, knowledge regarding, osteoarthritis, mortality

Introduction

"Regular exercising goes a long way in keeping your joints healthy".

- Luka Je.

Elders are those people with older age in a family. Since they are older, they play significant roles in family. Which includes nurturing young ones by imparting in them good morals, provision of education in order to provide them skills for attaining work and other situations. Provision of basic needs, assuring security to their family members, leading in performing certain rituals and customs and taking decision for the development of the family. Musculoskeletal conditions comprise more than 150 diseases that affect the locomotor system that is muscles, bones, joints, and associated tissues such as tendons and ligaments as listed in the international classification of diseases. They range from those that arise suddenly and are short lived, such as fractures, sprains, strains to lifelong conditions associated with ongoing pain and disability. Musculoskeletal conditions are typically characterized by pain and limitations in mobility, dexterity and functional ability, reducing people ability to work and participate in social roles with associated impacts on mental well-being. The most common and disabling musculoskeletal conditions are osteoarthritis, back pain, neck pain, fractures associated with bone fragility, injuries and systemic inflammatory conditions such as rheumatoid arthritis. Arthritis is a general term used when there is inflammation within the joints. Osteoarthritis is also known as degenerative joint disorder. Osteoarthritis is a long term chronic disease characterized by the breakdown of joint cartilage. Osteoarthritis is a type of joint disease that results from breakdown of joint cartilage and underlying bone. The most common symptoms are joint pain and stiffness. It develops in 1 in 12 people over the age of 60 years.

Research Methodology
Research methodology is the way to systematically solve the research problem.

Research Design
Pre-experimental (one group pre-test, post-test) design was used for present study.

Setting of the study
The study was conducted at Nagunur village, this is situated around 1 kilo meter from CMR institute of medical sciences, Kandlakoya, Medchal.

Population
The study population comprises of elderly at Kandlakoya Village, Medchal. The village consist 16,000 population.

Sample Size: The sample size for this study consist of 30 elderly in Kandlakoya village, Medchal, Telangana.

Sampling Technique
Non probability convenient sampling technique was used for selection of sample in this study.

Criteria for Sample Selection
Inclusion criteria
- Elderly living in selected rural areas.
- Elderly who are willing to participate in the study?

Exclusion criteria
- Elderly who are critically ill?
- Elderly who are not available at the time of the study?

Description of the Tool
It consists of two sections, Section A and Section B.

Section A
It deals with demographic variables such as age, gender, religion, type of family, educational status, occupation, socio economic status, habits, dietary pattern, source of information

Section B
A structured questionnaire consists of 30 multiple choice questions and each question has "4" choices, each correct response carries one mark and wrong response carries zero mark.

Procedure for data collection
Data was collected from the elderly with osteoarthritis after obtaining a formal written permission from the Sarpanch of Kandlakoya village. Each elderly was assured for the data collected from them will be utilized only for the purpose of study and was kept confidential. The investigator uses structured questionnaire to collect the data.

Section I
The demographic data was analyzed by using frequency and percentage. N for data analysis.

Section II
Association of post-test knowledge score among elderly regarding home care management of osteoarthritis with their selected demographic variables was analyzed by chi-square test.

Results
Frequency and percentage distribution on knowledge regarding home care management of osteoarthritis among elderly according to the demographic variables.

Table 1: Frequency and percentage distribution on knowledge regarding home care management of osteoarthritis among elderly according to the demographic variables

S. No.	Demographic variable	Frequency	Percentage %
	Age		
1.	a) 61-65 years	12	40
	b) 66-70 years	13	43.33
	c) 71-75 years	5	16.67
	d) 76 years and above	0	0
	Gender		
2.	a) Male	15	46.67
	b) Female	16	53.33
	Religion		
	a) Hindu	19	63.33
3.	b) Muslim	0	0
	c) Christian	11	36.67
	d) Others	0	0
	Marital status		
	a) Married	22	73.33
4.	b) Unmarried	0	0
	c) Widow	8	26.67
	d) Divorce	0	0
	Type of family		
5.	a) Joint family	6	20
	b) Nuclear family	24	80
	Educational qualification		
6.	a) Literate	14	46.67
	b) Illiterate	16	53.33

		Occupation		
7.	a) Labour	8	26.67	
	b) Agriculture	15	50	
	c) Private employee	4	13.33	
	d) Government employee	3	10	
	e) Business	0	0	
		Socio-economic status		
8.	a) Rs<5000/- only	8	26.67	
	b) Rs5001/ to 10,000/only	9	30	
	c) Rs10,001/ to 15,000/only	8	26.67	
	d) Rs15,001/ and above	5	16.66	
		Habits		
9.	a) Alcoholism	8	26.67	
	b) Gardening	6	20	
	c) Smoking	4	13.33	
	d) Watching television	12	40	
		Dietary pattern		
10.	a) Vegetarian	3	10	
	b) Mixed diet	27	90	

In this study out of 30 samples (40%) of elderly were in the age group of 61-65 years, (43.33%) of them were between 66-70 years, (16.67%) of them were between 71-75 years, (0%) of them from 76 years and above. With regard to gender (46.67%) elderly were male and remaining (53.33%) of elderly were belongs to female category. With regard to religion (63.33%) of elderly were Hindus, (0%) of them were Muslims, (36.67%) of them were Christians and (0%) of them were from other religion. Considering marital status (73.33%) of elderly were married, (0%) of elderly were unmarried, (26.67%) of elderly were widow, and (0%) of them were others. While considering type of family it is viewed that (20%) of elderly were belongs to joint family, (80%) of elderly were belongs to nuclear family. On the basis of educational qualification of elderly (46.67%) of were literate, it is clear that majority of the elderly (53.33%) of were illiterates. According to occupation majority of the elderly (26.67%) were from labour, (50%) of elderly were from agriculture, (13.33%) of elderly were from private employees, (10%) of elderly were government employees, and (0%) of them were business. According income of family per month (26.67%) of the elderly income below Rs. 5000/-only, (30%) of elderly income between Rs. 5001-10,000/-only, (26.67%) of elderly income between Rs. 10,001-15,000/-only, (16.66%) of elderly income was above 15,001/-. According to the habits it is viewed that the osteoarthritis elderly (26.67%) of were belongs to alcoholism, (20%) of were belongs to gardening, (13.33%) of were belongs to smoking, and (40%) of were belongs to watching television. According to the dietary pattern it is viewed that the osteoarthritis elderly (10%) of were belongs to vegetarian, (90%) of were belongs to mixed diet.

Comparison of pre-test and post-test knowledge score regarding home care management of osteoarthritis among elderly.

Table 2: Comparison of pre-test and post-test knowledge score regarding home care management of osteoarthritis among elderly

Parameters	Time interval	No. of subjects	Mean	Standard Deviation	t value	Critical Value
Knowledge	Pre-test	30	8.53	2.72	24.982	2.06
Regarding osteoarthritis among elderly	Post-test	30	20.36	3.42		

Difference of knowledge score is found statistically significant. The computed 't' value is 24.982 that are more than the table value of 2.06 at0.05 level. This reveals significant difference of knowledge score between pre-test and post-test.

Association between post-test knowledge score of elderly regarding home care management of osteoarthritis with their selected demographic variables was analyzed by chi-square test.

Above table Shows that gender, educational qualification, socio economic status, habits of osteoarthritis had significant association with knowledge score as the chi-square value is greater than critical value and there is no significance association between knowledge score and other demographic variables such as age, religion, marital status, type of family, occupation, dietary pattern, source of information.

Table 3: Association between post-test knowledge score of elderly regarding home care management of osteoarthritis with their selected demographic variables was analyzed by chi-square test

S. No.	Variables	Category	Knowledge score			Chi-square	DF	Critical value
			Below average	average	Above average			
1.	Age	a) 61-65 years	0	2	10	6.256	6	12.59
		b) 66-70 years	0	6	7			
		c) 71-75 years	0	4	1			
		d) 76 years and above	0	0	0			
2.	Gender	a) Male	0	9	5	6.45	2	5.99
		b) Female	0	3	13			
3.	Religion	a) Hindu	0	9	10	1.169 NS	6	12.59
		b) Muslim	0	0	0			
		c) Christian	0	3	8			
		d) Others	0	0	0			
4.	Marital status	a) Married	0	7	15	2.3 NS	6	12.59
		b) Un married	0	0	0			
		c) Widow	0	5	5			
		d) Divorce	0	0	0			
5.	Type of family	a) Joint family	0	2	4	0.137 NS	2	5.99
		b) Nuclear family	0	10	14			
6.	Educational qualification	a) Literate	0	0	14	17.49* S	2	5.99
		b) Illiterate	0	12	4			
7.	Occupation	a) Labour	0	5	3	6.62 NS	8	15.51
		b) Agriculture	0	7	8			
		c) Private employee	0	0	4			
		d) Government employee	0	0	3			
		e) Business	0	0	0			
8.	Income	a) Rs. <5000/- only	0	7	1	15.1* S	6	12.59
		b) Rs 5001 to 10,000/- only	0	0	9			
		c) Rs 10,001 to 15,000/- only	0	2	6			
		d) Rs 15000 and above	0	3	2			
9.	Habits	a) Alcoholism	0	7	1	14.17* S	6	12.59
		b) Gardening	0	0	6			
		c) Smoking	0	0	4			
		d) Watching television	0	5	7			
10	Dietary pattern	a) Vegetarian	0	0	3	2.21 NS	2	5,99
		b) Mixed diet	0	12	15			

*=Significant, NS= Nonsignificant

Discussion

Osteoarthritis is a chronic joint condition that causes cartilage break down in different parts of the body. Although there are no specific known causes for osteoarthritis, numerous risk factors have been identified. Age, gender, excess weight, genetic predisposition injury, and chronic health conditions are the most common risk factors. In the present study findings revealed that the mean of knowledge score in pre-test 63.33% of osteoarthritis elderly had below average knowledge and 36.67% of osteoarthritis had average knowledge score, where as in post-test 40% of osteoarthritis elderly had average knowledge and 60% of osteoarthritis elderly had above average knowledge score.

Conclusion

Osteoarthritis disease is an important public health challenge in both economically developing and developed countries. An appropriate intervention programme should be launched for increasing the awareness among the population, public must be educated regarding home care management of osteoarthritis. Thus structured teaching programme was significantly improving the knowledge regarding home care management of osteoarthritis among elderly.

Conflict of Interest

Not available

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Not available

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