



**A STUDY TO ASSESS THE KNOWLEDGE ON HOME CARE MANAGEMENT OF  
KNEE PAIN AMONG WOMEN AT SELECTED COMMUNITY AREA, KOLLAM**

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**ABSTRACT**

**Introduction:** People of all ages commonly complain about knee pain. An injury, such as a torn ligament or damaged cartilage, may cause knee pain. Knee discomfort can also be caused by medical disorders such as arthritis, gout, and infections. Once they turn 30 years old, most women start to suffer from severe knee and joint pain. Without visiting a doctor, knee pain can be managed at home with care management, lifestyle adjustments, and natural therapies. **Materials and Methods:** Quantitative approach with descriptive Non- experimental research design was used in this study. The study was conducted in Pallithottam community area Kollam, Kerala. The target population was women who are above 30 years. The non-probability convenient sampling technique was used to collect data. Formal permission was taken by Institutional ethics committee and consent from the participants and data were collected through a knowledge questionnaire .The tools which consisted of Demographic Proforma and knowledge related to home care management of knee pain (treatment,diet,rest and exercise).The collected data were analyzed using descriptive and inferential statistics. **Result:** The study revealed that 70% had average knowledge and 30% had good knowledge related to home care management of knee pain among women. There was no association between knowledge score and demographic variables at 0.05 level of significance. **Conclusion:** Knee pain is a common problem among women. Home care management can reduce the knee pain. The study found that 70% had average knowledge and 30% had good knowledge on home care management of knee pain among 100 participants.

**KEYWORDS:** Assess, knowledge, structured knowledge questionnaire, home care management of knee pain.

**INTRODUCTION**

Most of the women tend to experience acute knee and joint pains once they cross the age above 30 years. This problem is not specifically faced by the Indian women themselves. This is a common condition which is faced by a majority of the women on a global level.<sup>[1]</sup> Knee pain is a common complaint that affects people of all ages. Knee pain may be the result of an injury, such as a ruptured ligament or torn cartilage. Medical conditions including arthritis, gout and infections, also can cause knee pain.<sup>[2]</sup>

Knee pain can have different causes. Being overweight puts you at greater risk for knee problems. Overusing your knee can trigger knee problems that cause pain.<sup>[3]</sup> Home care management, lifestyle changes and natural remedies can be used to manage knee pain without heading into the doctor's office.<sup>[4]</sup>

**OBJECIVES**

1. To assess knowledge on home care management of knee pain among women at selected community area, Kollam.
2. To find the association between knowledge scores on home care management of knee pain among women with selected demographic variables such as age, education, type of family ,job, family income and source of information.

**MATERIALS AND METHODS**

Approach: Quantitative approach

Design: Non experimental descriptive research design

Population: women residing at Pallithottam, Kollam

Sample: women who are above 30 years at selected community area, Kollam

Sampling technique: Non-probability convenient sampling technique

Setting: houses located at Pallithottam community area, Kollam.

Data collection method: self- structured questionnaire

**Inclusion criteria**

1. Those who are not having intellectual or developmental disabilities.
2. Those who are interested in this study.

**Exclusion criteria**

1. Those who are severely sick.
2. Those who are not willing to participate in this study.

**Data collection process**

We communicated the purpose and significance of the study with the participants through direct communication. Data were collected through self-structured questionnaire.

**Ethical approval and informed consent**

Formal permission was taken from the institutional ethics committee. Formal permission received from the concerned authority and consent letter from the participants.

**Tool****Section A****Demographic Proforma**

Section A consisted of information regarding demographic variables such as age, education, type of family, job, family income and source of information of the participants.

**Section B**

Self-structured knowledge questionnaire

**Reliability**

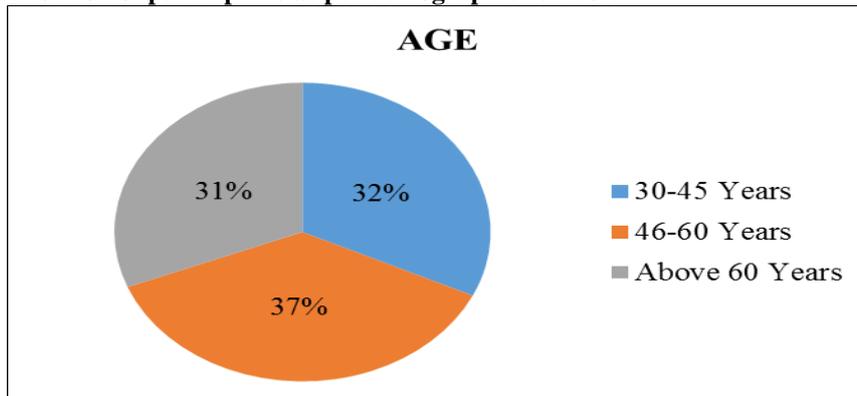
The reliability of knowledge questionnaire was 0.76 which was checked by using test retest method indicating that the tool was reliable.

**Analysis****1. Descriptive analysis**

Sample characteristics were analyzed using frequency and percentage distribution.

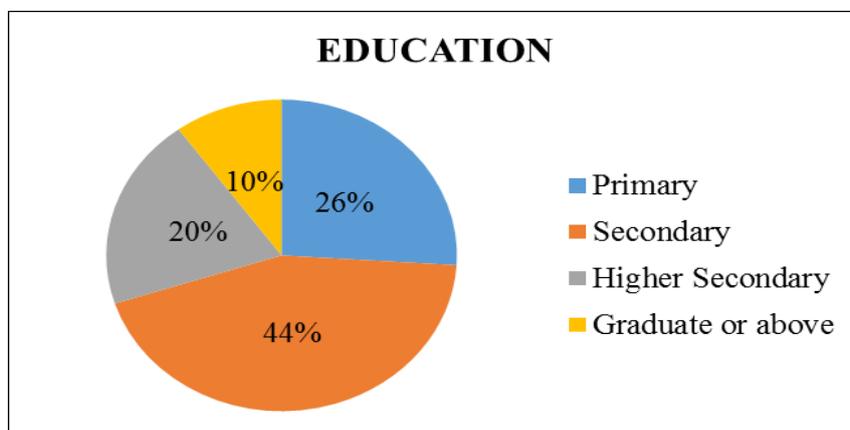
**2. Inferential analysis**

Association between level of knowledge and selected demographic variables was analyzed through using chi-Square test.

**RESULTS****A. Percentage distribution of participants as per demographic variable**

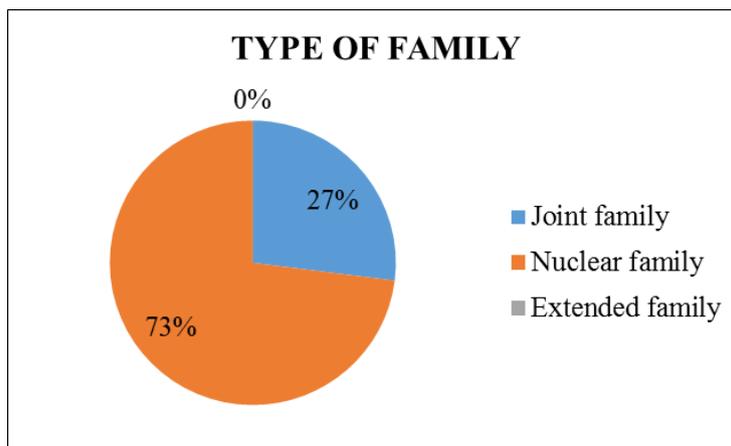
**Figure 1: Percentage wise distribution of the sample according to age.**

The data presented in fig 1 shows, 32% of the sample belonged to the age group of 30-45 years and 37% belonged to the age group of 46-60 years and 31% belonged to the age group of above 60 years.



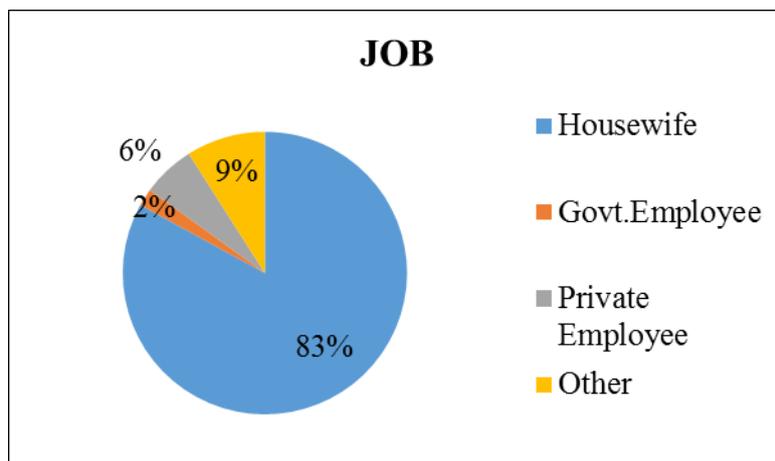
**Figure 2: Percentage wise distribution of the sample according to education.**

The data presented in fig 2 shows that, 26% had primary education, 44% had secondary education, 20% had higher secondary education and 10% were graduates or higher qualified.



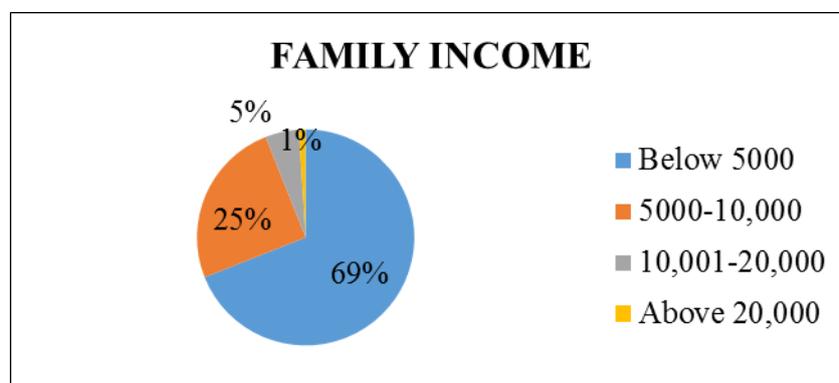
**Figure 3: Percentage wise distribution of the sample according to type of family.**

The data presented in fig 3 shows that majority of the sample (73%) live in nuclear family and 27% of the sample live in joint family.



**Figure 4: Percentage wise distribution of the sample according to job.**

The data presented in fig 4 shows that majority of the sample( 83%) were housewives and 6% work in private sector,2% work in government sector and 9% belonged to other categories.



**Figure 5: Percentage wise distribution of the sample according to family income.**

The data presented in fig 5 shows that 69% were with family income of below Rs. 5000, 25% were with family income between Rs.5000 – 10,000,5% were with family income between Rs. 10,001 – 20,000 and the remaining 1% were with family income of above Rs.20000.

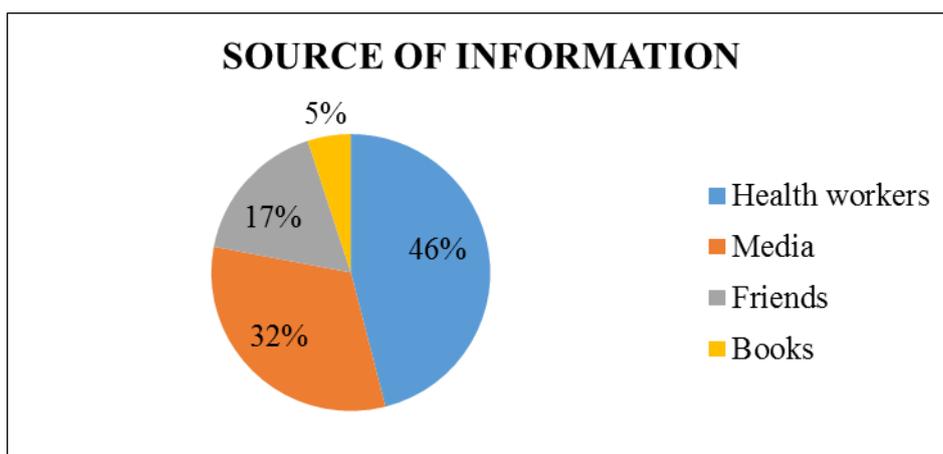


Figure 6: Percentage wise distribution of the sample according to source of information.

The data presented in fig 6 shows that, 46% of the sample got information through health workers, 32% got information through media, 17% got information through friends and 5% got information through books.

#### Description of knowledge scores of women on home care management of knee pain

Table 1: frequency and percentage distribution of score on knowledge regarding home care management of knee pain.

Score	Range	Frequency	Percentage
21-30	Good Knowledge	30	30%
11-20	Average Knowledge	70	70%
0-10	Poor Knowledge	0	0%

Data in table 1 shows 70% of the sample possessed average level of knowledge and 30% possessed good level of knowledge on home care management of knee pain.

#### Association between knowledge of women on home care management of knee pain with selected demographic variables.

Table 2: Association between knowledge score and selected demographic variables.

Sl No	Variables	Knowledge			df	Chi-square value	Table value	Level of significance
		Good	Average	Poor				
1.	<b>Age:</b>							
	30-45 years	4	28	0	4	8.156	9.48	NS
	46-60 years	12	25	0				
	Above60 years	14	17	0				
2.	<b>Education:</b>							
	Primary	7	19	0	6	2.32	12.59	NS
	Secondary	14	30	0				
	Higher Secondary	7	13	0				
	Graduate	1	9	0				
3.	<b>Type of family:</b>							
	Joint family	6	21	0	4	1.06	9.48	NS
	Nuclear family	24	49	0				
	Extended family	0	0	0				
4.	<b>Job:</b>							
	House wife	23	60	0	6	4.92	12.59	NS
	Govt. employee	0	2	0				
	Private employee	4	2	0				
	Others	3	6	0				
5.	<b>Family income:</b>							
	Below 5000	20	49	0	6	0.72	12.59	NS
	5000-10000	8	17	0				
	10001-20000	2	3	0				
	Above 20000	0	1	0				

Sl No	Variables	Knowledge			df	Chi-square value	Table value	Level of significance
		Good	Average	Poor				
6.	Source of information							
	Books	0	5	0	6	2.69	12.59	NS
	Friends	5	12	0				
	Media	9	23	0				
	Health Workers	16	30	0				

Table 2: shows the association between knowledge and demographic variables. The association was found out by using chi-square test. It was inferred that the present study shows no significant association between knowledge score and demographic variables such as age, education, type of family, job, family income and source of information.

### DISCUSSION

The present study revealed that 70% of women had average knowledge and 30% women had good knowledge on home care management of knee pain among women.

The findings of the study were supported by a similar study conducted to assess the knowledge and practice on home remedies for knee joint pain among adults. Convenient sampling technique was used to select 60 adults in Vadacheri village at Vellore. The study findings showed that 30% had adequate knowledge, 67% had moderate knowledge, and 3% had inadequate knowledge regarding home remedies for knee joint pain among adults.<sup>[5]</sup>

There was no significant association between knowledge score and demographic variables such as age, education, type of family, job, family income and source of information.

The findings are supported by a study conducted at selected community areas in Coimbatore to assess the effectiveness of home care management and remedial practices on knee pain among 60 elderly. The chi-square value of all demographic variables (Age, Sex, Education, Marital status, Occupation, Type of family and BMI) of pretest and posttest pain score in control group was less than the table value. This result revealed that in control group knee joint pain perception was not associated with demographic variables of elderly. In experimental group, the chi-square value of all demographic variables of pretest pain score was less than the table value. This result denoted that in experimental group the pretest score on knee joint pain perception was not associated with demographic variables of elderly except occupation. In occupation, calculated value was more than the table value which indicated that there was association between knee joint pain perception and occupation. The chi-square value of all demographic variable in experimental group in posttest pain perception was less than the table value indicating that knee joint pain perception was not associated with demographic variables in post test.

### CONCLUSION

The present study was aimed to assess the knowledge on home care management of knee pain among women at selected community area, Kollam. The results showed that, 70% of women had average knowledge and 30% women had good knowledge. Association between knowledge score and demographic variables among women was analyzed using chi square test. There was no significant association between knowledge score and demographic variables such as age, education, type of family, job, family income and source of information.

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Nil

### Conflict of interest

There are no conflicts of interest

### REFERENCES

1. Dr. Sudharshan Reddy."Why Women Have Knee And Joint Pains After They Cross The Age Of 35-40 Landmark hospital blog. Health library, Dec 13 2018, (cited 2022 June) available from <https://www.landmarkhospitals.net/blog/>
2. Mayo Foundation for Medical Education and Research. (2023, January 25). Knee pain. Mayo Clinic.(cited 2022 June), available from: <https://www.mayoclinic.org/diseases-conditions/knee-pain/symptoms-causes/syc-20350849>.
3. U.S. National Library of Medicine. (n.d.). Knee pain: Medlineplus medical encyclopedia. MedlinePlus.(cited 2022 June), available from: <https://medlineplus.gov/ency/article/003187.htm>.
4. Bhatia, S. (2023, March 16). Home remedies for knee pain. PharmEasy Blog. (cited 2022 June ), available from: <https://pharmany.in/blog/home-remedies-for-knee-pain/>
5. Parimala, Anitha, knowledge and practice on home remedies for knee joint pain among adults at

Vadacheri village, International Journal of Pharma and Bio Sciences sp04:1-7 July 2019.(cited 2022 June), Available from: <https://www.researchgate.net/publication/334576420>

6. Lakshmi Priya, A study to assess the effectiveness of home care management and remedial practices on knee joint pain among elderly at selected communities at Coimbatore, Masters thesis, KMCH College of Nursing, Coimbatore, 2012.(cited 2022 Aug) Available from :<http://repositorytnmgrmu.ac.in/12995/>.