A cross sectional study to assess the knowledge on management of arthritis among OPD patients, Neigrihms

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Abstract

Introduction: Arthritis is a common disorder that affects the joints which can cause pain and inflammation, making it difficult to move or stay active. There are many types of arthritis like osteoarthritis, rheumatoid arthritis, gout, septic arthritis, ankylosing spondylitis each with different causes including wear and tear, infections and underlying diseases.

Methodology: The research design was non - experi mental, cross-sectional study design. Data was collected using self-administered knowledge-based questionnaire and data was analyzed by descriptive statistics like mean, frequency and percentage and inferential statistics like chi square.

Results: The study revealed that out of 215 participants, the majority of the participants 114 have average knowledge regarding management of arthritis and majority of the participants 77 belong to the age group of 20-39 years and out of which majority of them 65 are males. The majority of the participants 59 who are graduate and above have average knowledge. The majority of the participants 56 who are employed have average knowledge. The level of knowledge regarding general knowledge of arthritis is 59%. The level of knowledge regarding sign and symptoms of arthritis is 52% and the management and prevention of arthritis is 57%. There is significant association between knowledge regarding management of arthritis with education

Conclusion: Arthritis is a major public health problem, yet it is a problem that is largely unknown to majority of the population. This requires interventions to modify disease progression, to impart knowledge and awareness regarding arthritis, its self - management efforts to improve or maintain function and quality of life.

Keywords: Arthritis, Management, knowledge

Introduction

"Arthritis" literally means joint inflammation. Although joint inflammation is a symptom or sign rather than a

specific diagnosis, the term arthritis is often used to refer to any disorder that affects the joints. These disorders fall within the broad category of rheumatic diseases. These are diseases characterized by inflammation (signs include redness or heat, swelling, and symptoms such as pain) and loss of function of one or more connecting or supporting structures of the body. They especially affect joints, tendons, ligaments, bones, and muscles. There are more than 100 rheumatic diseases that collectively affect more than millions of people worldwide.

Arthritis affects 15% of Indian population i.e., about 180 million people (Gupta BM and et.al, India, 2017).

Types of arthritis Osteoarthritis

Osteoarthritis is the most frequent joint disease with a prevalence of 22% -39% in India (Pal CP and et.al, India,2016) In osteoarthritis, there is damage to the cartilage, which begins to fray and may wear away entirely. There is also damage to the bond stock of the joint. Osteoarthritis can cause joint pain and stiffness. Disability results most often when the disease affects the spine and the weight- bearing joints (the knees and hips)

Rheumatoid arthritis

One percent of India population has rheumatoid arthritis i.e., almost 10 lakh people are affected by it (The Shillong Times, June 29, 2020). Rheumatic Arthritis is the inflammatory disease of the immune system, and it targets first the synovium or lining of the joint, resulting in pain, stiffness, swelling, joint damage, and loss of function of the joints. Inflammation most often affects joints of the hands and feet and tends to be symmetrical. It affects most of the people in the younger age group between 20 - 40.

Other type of arthritis includes gout, septic arthritis, ankylosing spondylitis, juvenile-idiopathic arthritis.

Joint pain can also be a symptom of other diseases. In this case, the arthritis is considered to be secondary to the main disease, these include Psoriasis (Psoriatic arthritis), reactive arthritis, etc.

Need of the study

Arthritis is highly prevalent affecting more than 180 million people in India. Its prevalence is higher than many well-known diseases such as diabetes, AIDS, and Cancer Lack of awareness and knowledge of effective arthritis management among people likely contributes to the under-utilization of necessary management. People with arthritis usually believe that arthritis is something to be tolerated not managed and they do not begin to seek out solution until arthritis begins to threaten their valued life activities. On the view of this it is important to assess the knowledge of people on management of arthritis.

Objectives

➢ Primary objectives: To assess the knowledge on management of arthritis among patients attending OPD.

➢ Secondary objectives: To find the association between knowledge and the selected demographic variables

Hypothesis

There is a significant association between knowledge and socio demographic variable.

Methodology

After obtaining Institutional Ethical Clearance and administrative permission, a cross sectional study was adopted to assess the knowledge on management of arthritis among OPD patients, NEIGRIHMS. Final study was conducted on patients attending OPD of General Medicine and Orthopaedic departments of NEIGRIHMS Hospital Shillong. 215 adults who met the inclusion criteria. A structured knowledge-based questionnaire was distributed for collection of data

• Research approach: Quantitative research approach was used

• Research design: cross-sectional study design

• Research variable: Independent Variables

Socio demographic variable

- Age
- Gender
- Educational status
- Occupation

Outcome Variable – Awareness on management of arthritis

Confounding and interacting variable – Not applicable

Setting. General Medicine and Orthopaedic Outpatients departments of NEIGRIHMS hospital Shillong

Population

Patients attending OPD of General Medicine and Orthopaedic departments of NEIGRIHMS Hospital Shillong

Sample

Inclusion criteria

- Patients aged 20 and above
- Patients who are willing to participate.
- Patients who are present during the study.

Exclusion criteria

Patients who cannot read and write English, Hindi, Khasi language

Sampling technique: non-probability convenience sampling

Tools for data collection: The tools used for the study consists of the following

Section I: Questionnaire to collect the socio demographic data like age, gender, education, and occupation.

Section II: It consists of 22 knowledge-based question naires containing the following areas:

PART A: General knowledge about Arthritis.

PART B: Signs and symptoms

PART C: Management and prevention of arthritis

A blueprint was prepared specifying the various domains and content area. Blueprint is given below in Table 1.

Table 1: Blueprint content and domain wise distribution of scores on structured knowledge-based questionnaire for assessment of knowledge on management of arthritis.

Content	Knowledge	Score
General knowledge about arthritis	5(5,6,7,8,9)	5(22.73%)
Sign and symptoms	3(10,11,12)	3(13.64%)
Management and prevention of arthritis	14(13,14,15.,16,17,18,19,20,21,22,23,24,25,2)	14(63.63%)
Total	22	22(100%)

Results

Findings related to the socio-demographic variables of the participants.

Table 2: Frequency and percentage distribution of the participants according to the socio – demo graphic varia bles. n= 215

Variables	Frequency (f)	Percentage (%)
Age (in years)		
20-39	149	69%
40-59	61	29%
60 and above	5	2%
Gender		
Female	90	42%
Male	125	58%
Education		
Class XII and below	67	31%
Undergraduate	53	25%
Graduate and above	95	44%
Occupation		
Student	45	21%
Employed	112	52%
Unemployed	58	27%

Table 2 shows that majority of the participants 149 (69%) belongs to the age group 20-39 years and most of participants 125 (58%) were males. Majority of the

participants 95 (44%) were graduate and above and majority of the participants 112 (52%) were employed.

Table 3: Frequency and percentage distribution of knowledge score of the participants regarding manage Ment of arthritis. n=215

Knowledge score	Frequency(f)	Percentage (%)
Good (>17)	36	17%
Average (11-16)	114	53%
Poor (<10)	65	30%

Table 3 depicts that majority of the participants 114 (53%) had average knowledge and 65 (30%) had poor knowledge, and 36 (17%) participants had good know led ge.

Table 4: Frequency distribution of knowledge score of the participants management of arthritis according to socio-demographic variables. n = 215

Demographic variables	Good knowledge	Average knowledge	Poor Knowledge
Age (in years)			
20-39	25	79	45
40-59	10	33	18
60 and above	1	2	2
Gender			
Female	18	49	23
Male	18	65	42
Education			
Class XII and below Under graduate and above	6 9 21	34 21 59	27 23 15
Occupation			
Student	6	23	16
Employed	21	56	35
Unemployed	9	35	14

Table 4 depicts that majority of the participants i.e., 79 belonging to the age group 20-39 years had average knowledge. 65 male participants had average knowledge. 59 participants who were graduates and above had

average knowledge and 56 participants who are employ ed had average knowledge.

Figure 1: Percentage distribution of level of knowledge of the participants on management of arthritis according to the domains. n=215
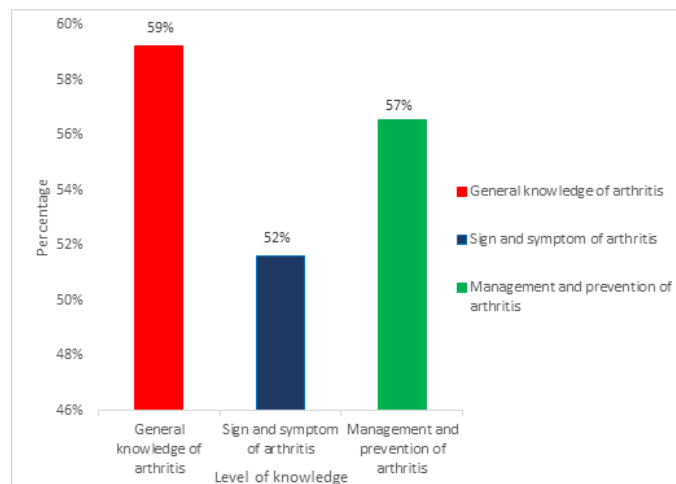

Figure 1 shows that the level of knowledge of the participants regarding general knowledge of arthritis is 59%, signs and symptoms of arthritis is 52%, manage Ment and prevention of arthritis is 57%.

Table 5: Chi-Square value showing association between knowledge and selected demographic variables. n=215

Demographic Variables	Good Knowledge	Average Knowledge	Poor Knowledge	Tabulated Value	df	Chi-Square
Education						
Class XII and below	6	34	27	9.49	4	19.24*
Undergraduate	9	21	23			
Graduate and above	21	59	15			

*Significant at p≤0.05 level

Table 5 depicts that the computed chi-square value of education (χ^2 19.24) was found to be statistically significant. However, the computed chi-square value of

age (χ^2 2.01), gender (χ^2 2.16) and occupation (χ^2 3.92) were found to be statistically not significant. In conclusion the knowledge regarding management of arthritis depends upon the education of participants.

Discussion

Arthritis is a large and growing public health concern among people that urgently needs attention, yet it is a problem that is largely unknown by majority of the population. In this section, the major findings of the present study have been discussed with reference to the results obtained by other investigators.

The result of the present study showed that among 215 adult participants, 17% had good knowledge, 53% had average knowledge and 30% had poor knowledge regarding management of arthritis. A similar study was conducted by Kevin Christian et.al in 2018 on a descriptive study to asses knowledge and attitude regarding Rheumatoid Arthritis among industrial workers of Vadodara with the view to provide an individual counselling. The result revealed that among 150 participants 0.66% had good knowledge, 56% had average knowledge and 43.33% had poor knowledge regarding rheumatoid arthritis.

According to the domain, the present study showed that out of 215 participants, 59% of the participants had general knowledge on arthritis, 52% had knowledge on sign and symptom of arthritis and 57% had knowledge on management of arthritis respectively. A similar study was conducted by Zarghoona Khalil et.al, in 2017 on Patients' knowledge on Rheumatoid Arthritis – A study at a tertiary care hospital at Rawalpindi, Pakistan. The result revealed that of the 200 participants 159 (79.5%) had general knowledge on the disease, 181 (90.5%) patients were aware of the symptoms of the disease and 177 (88.5%) believed that management was available for RA The present study also showed that there was

significant association between education of participants and knowledge regarding management of arthritis. A similar study was conducted by F. Jennings et.al in 2006 on Brazil patient knowledge questionnaire (PQK) and evaluation of disease- specific knowledge in patients with rheumatoid arthritis. The result revealed a positive correlation with level of education.

Conclusion

Arthritis are a major public health problem, they are progressive debilitating diseases with no cure. Persons with arthritis tend to report that they are hampered severely in their capacity to perform their day-to-day physical and social activities. Based on the findings of the study it can be concluded that majority of the adults attending OPD of NEIGRIHMS Hospital have average knowledge regarding management of arthritis. The present study also revealed that there was a significant association between knowledge with education of the participants. So, a planned health teaching programme, health camps can be conducted on Arthritis and its management to impart knowledge and awareness among the people.

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