

# A Descriptive Study to Assess Knowledge And Attitude Regarding Rheumatoid Arthritis Among Industrial Workers Of Vadodara With The View to Provide An Individual Counselling

Kevin Christian<sub>1</sub>, Nikhil Vaishnav<sub>2</sub>, Dr. Ravindra HN<sub>3</sub>

1. Assistant Professor, Department Of Medical Surgical Nursing, Sumandeep Nursing College, Sumandeep Vidyapeeth, Vadodara, India.
2. Post Graduate student, Sumandeep Nursing College, Sumandeep Vidyapeeth, Vadodara, India.
3. Principal, Sumandeep Nursing College, Head of Department, of Medical Surgical Nursing, Sumandeep Nursing College, Sumandeep Vidyapeeth, Vadodara, India.

## ABSTRACT

**BACKGROUND OF THE STUDY:** Rheumatoid arthritis is an autoimmune ailment in which joints are damaged and cause disability. In rheumatoid arthritis the body's tissues are attacked by its own immune system. In rheumatoid arthritis inflamed tissue leads to damage by loosening joint ligaments. 1% population of India is affected with rheumatoid arthritis. Rheumatoid arthritis is not cured fully. Some treatment can reduce symptoms and reduce the progression of the disease. **AIMS AND OBJECTIVE:** The aim of this study is to assess the level of knowledge and attitude regarding rheumatoid arthritis among industrial workers of Vadodara. **MATERIAL AND METHODS:** A non-experimental descriptive research design was used for this study. 150 Industrial workers were selected by using non-probability convenient sampling. Data was collected through self-structured questionnaire and likert scale. The collected data was tabulated and analyzed using descriptive and inferential statistics. The conceptual framework used for this study was Health belief model. **RESULTS:** The findings of the study revealed among 150 participants, majority of the industrial workers (56%) had average knowledge, 43.33% had poor knowledge score and only 0.66 % had good knowledge of Rheumatoid arthritis. Majority of workers (63.33%) had neutral attitude about Rheumatoid arthritis, 34% respondents had negative attitude and remaining 2.66% respondents had positive attitude about rheumatoid arthritis. In all socio-demographic variables education, work experience and health check-up was found to be associated with pre-test knowledge. Age, education, work experience, monthly income, health check-up were found to be associated with attitude score. **CONCLUSION:** The study concludes that majority of industrial workers have average knowledge and moderate attitude regarding rheumatoid arthritis.

**KEY WORDS:** Knowledge, Attitude, Rheumatoid arthritis, Industrial workers.

## INTRODUCTION

Rheumatoid arthritis is a devastating joint disease that is induced by inflammation in the tissues that generates fluid for lubrication of the joint. Rheumatoid arthritis is a usual rheumatic disease, affecting around 1.3 million people in the United States, according to current data of census.<sup>1</sup> 1% population of India are affected with rheumatoid arthritis.<sup>2</sup> It usually starts between 40-60 years of age group.<sup>1</sup> The Etiology of rheumatoid arthritis is not known yet. It is an idiopathic illness. Rheumatoid arthritis mainly affects joints, but in 15-25 % of individuals another organs are also affected.<sup>3</sup> Movements of the body are limited due to stiffness. As time increases rheumatoid arthritis affects multiple joints of body which is referred to as polyarthritis.<sup>4</sup> The main feature of the rheumatoid arthritis is increased stiffness in the early morning and it lasts for more than 1 hour.<sup>5</sup> Symptoms of Rheumatoid arthritis include pain in the joint, tenderness, swelling or stiffness for 6 weeks or longer and stiffness of joints in early morning for 30 minutes or longer.<sup>6</sup>

Rheumatoid arthritis cannot be conformed with a single test. ESR and C-reactive protein are markers of inflammation in the rheumatoid arthritis. Rheumatoid factor (RF) is an antibody which is found in 80% of

rheumatoid arthritis cases. Another antibody anti- cyclic citrullinated peptide (anti-CCP) present with patient of rheumatoid arthritis.<sup>7</sup> Rheumatoid arthritis is not cured fully. Some treatment can reduce symptoms and reduce the progression of the disease. If disease modifying treatment is used in early phase, it provides result.<sup>8</sup>

## **OBJECTIVES OF THE STUDY**

1. Assess the knowledge and attitude regarding the control of symptoms of Rheumatoid Arthritis among workers.
2. Find association between pretest knowledge and attitude score with selected demographic variables.

## **METHODOLOGY**

**RESEARCH APPROACH:** Quantitative observational approach.

**RESEARCH DESIGN:** Non experimental descriptive research design.

## **VARIABLES UNDER THE STUDY**

**Research variables:** In the study, Knowledge and attitude regarding rheumatoid arthritis among industrial workers is research variable.

**Dependent variables:** In this study, Demographic variables are age, education qualification, total work experience, monthly income, type of employment, health check-up.

**RESEARCH SETTING:** In this study setting refers to the selected company of Vadodara district.

**POPULATION:** Industrial workers.

**SAMPLE AND SAMPLING TECHNIQUE:** Samples are industrial workers of Vadodara and Sampling technique is Non- Probability Convenience sampling.

## **DATA COLLECTION TECHNIQUES AND TOOLS:**

### **DATA COLLETION TOOL**

Section 1: Demographic variables include characteristics of worker's age, education qualification, work experience, type of employment, monthly income, health check-up.

Section 2: Self structured questionnaire was used to assess the knowledge regarding the knowledge regarding Rheumatoid arthritis among Industrial workers at Vadodara.

Section 3: A 5 scale Likert scale was used to assess attitude regarding rheumatoid arthritis.

## **RESULTS**

### **FINDING ARE ORGANISED IN THE FOLLOWING SECTION**

#### **SECTION 1 : Analysis of sociodemographic characteristics of the respondent:**

Distribution of the respondents according to age shows that among 150 participants 33(22 %)respondents belong to the age group of >25 years, 37(24.66%) respondents belong to age group 25-30 years, 30(20%) respondents belong to age group 30-35 years and 50(33.33%) belong to above 35 years age group. Distribution of the respondents according to educational qualification shows that among 150 participants 2( 1.33%) respondents were Illiterate,87( 58%) were having Primary education, 43(28.66%) were having Secondary education and 18(12%) were having Senior secondary education. Distribution of the respondents

according to work experience shows that among 150 participants 42(28%) respondents were having 0-3 years work experience, 46(30.66%) were having 3-6 years work experience, 41(27.33%) were having 6-9 years work experience and remaining 21(14%) respondents were having above 9 years of total work experience. Distribution of the respondents according to monthly income shows that among 150 participants 77(51.33%) respondents had monthly income of 5001-10,000, 42(28%) had monthly income of 10,001-15,000 and remaining 31(20.66%) respondents had above 15,000 monthly incomes. Distribution of the respondents according to types of employment shows that among 150 participants all 150(100%) respondents were having temporary types of employment. Distribution of the respondents according to health check-up shows that among 150 participants 9(6%) respondents get Quarterly health check-up, 13(8.66%) get yearly health check-up and remaining 128(85.33%) respondents get health check-up if needed.

## SECTION 2: Assessment of knowledge regarding Rheumatoid arthritis among industrial workers:

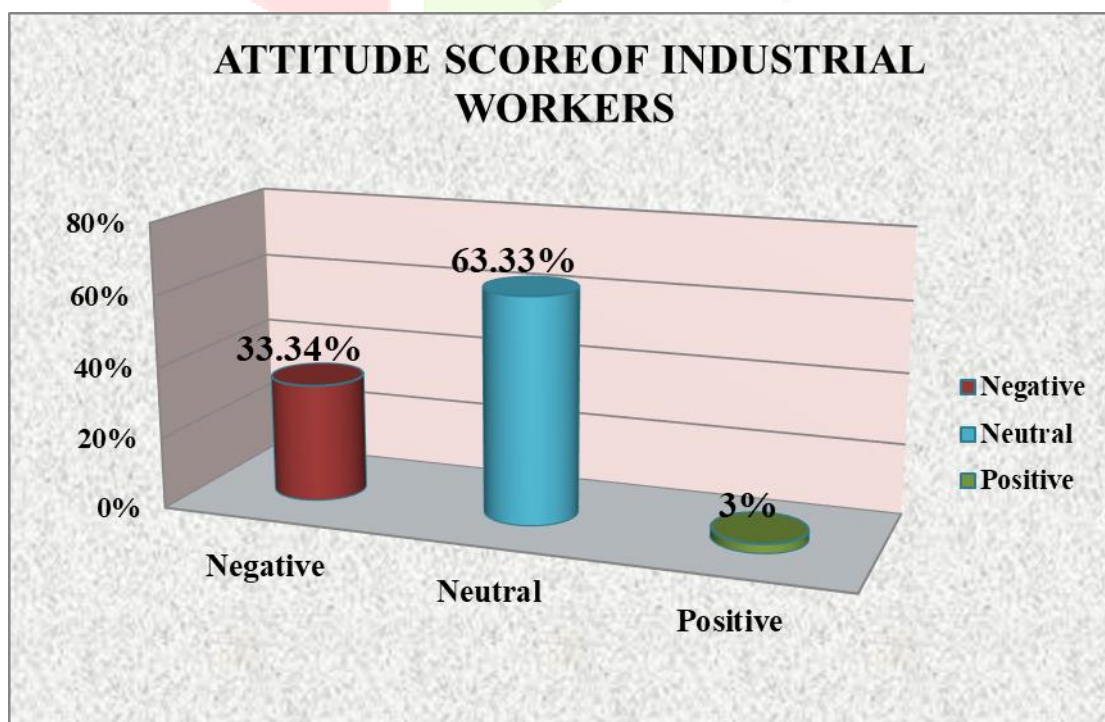
The overall distribution of Pretest knowledge regarding rheumatoid arthritis shows that among 150 participants 84(56%) had average knowledge, 65(43.33%) had poor knowledge and only 1(0.66%) had good knowledge of rheumatoid arthritis.

### Distribution of level of knowledge among industrial workers regarding rheumatoid arthritis. (Pre-test)

GRADE	SCORE	FREQUENCY	PERCENTAGE
Poor	0-7	65	43.33
Average	8-13	84	56
Good	14-20	1	0.66

## SECTION 3: Distribution of level of attitude among industrial workers regarding rheumatoid arthritis:

The overall distribution of level of attitude regarding rheumatoid arthritis shows that among 150 participants 95(66.33%) neutral attitude, 51(34%) had negative attitude and only 4(2.66%) had positive attitude regarding rheumatoid arthritis.



GRADE	SCORE	FREQUENCY	PERCENTAGE
Negative	0-17	51	34%
Neutral	18-34	95	66.34%
Positive	35-50	4	2.66%

#### SECTION 4: Association between selected demographic variables with pre-test knowledge score and attitude score:

Among all socio demographic variables the obtained  $\chi^2$  value is more than the table

of  $\chi^2$  at 0.05 level of significance. Hence the obtained  $\chi^2$  value is significant. Hence education, work experience, health check-up were found to be associated with pre-test knowledge. In age, monthly income  $\chi^2$  value is less than the table of  $\chi^2$  at 0.05 level of significance. Therefore age, monthly income was not significant associated with knowledge score.

Among all socio demographic variables the obtained  $\chi^2$  value is more than the table of  $\chi^2$  at 0.05 level of significance. Hence the obtained  $\chi^2$  value is significant. Hence age, education, work experience, monthly income, health check-up were found to be associated with attitude score.

#### RECOMMENDATIONS

Based on the finding of the present study recommendations offered for the future study are:

1. A Similar study can be conducted on a larger sample to generalize finding.
2. A similar study can be conducted with planned educational programme.
3. A similar study can be conducted in community settings.
4. A comparative study may be conducted to find out the effectiveness between self-structured module and planned teaching programme on same topic.
5. A similar study can be carried out to evaluate the effectiveness of planned teaching programme on the control of symptoms of rheumatoid arthritis.
6. A study can be conducted by including additional demographic variable.

#### DISCUSSION

The present study was conducted to assess the “Knowledge and attitude regarding rheumatoid arthritis among industrial workers of Vadodara.” It was found industrial workers had average knowledge and neutral attitude regarding rheumatoid arthritis.

Various evidences showed that **Chun Lai Too (2016)** the study was carried out to investigate association between textile dust exposure and the risk of rheumatoid arthritis in Malaysian population.<sup>9</sup> (**A Ilar 2017**) The study was on Occupational exposure to asbestos and risk of rheumatoid arthritis. The aim of this study was to estimate the risk of RA from ever occupational asbestos exposure as well as years with exposure among men and women.<sup>10</sup> **Anderson J.A. (1 April,1971)** conducted a review study on rheumatism in industry. Study was done regarding information about causes, affect and prevention of rheumatic disease among industrial workers. Sample was 2684 male employee .<sup>11</sup> **A Reckner Olsson (2004)** conducted study to evaluate association between the occupational exposure and rheumatoid arthritis.<sup>12</sup>

**CONCLUSION:** Analysis of obtained data was planned based on the objectives of the study, both descriptive and inferential statistics were used for the analysis of the data. The data is interpreted in the forms of tables and graphs.

## REFERENCES

1. [http://www.medicinenet.com/rheumatoid\\_arthritis/article.html#rheumatoid\\_arthritis\\_ra\\_facts](http://www.medicinenet.com/rheumatoid_arthritis/article.html#rheumatoid_arthritis_ra_facts).
2. <http://rheumatology-india.com/rheumatoid-arthritis.html>.
3. Turesson C, O'Fallon WM, Crowson CS, Gabriel SE, Matteson EL (2003). "Extra-articular disease manifestations in rheumatoid arthritis: incidence trends and risk factors over 46 years". *Ann. Rheum. Dis.* 62 (8): 722–7. PMC 1754626 Freely accessible. PMID 12860726. doi:10.1136/ard.62.8.722.
4. Walker, Brian R.; Colledge, Nicki R.; Ralston, Stuart H.; Penman, Ian D., eds. (2014). *Davidson's principles and practice of medicine* (22nd ed.). Churchill Livingstone/Elsevier. ISBN 978-0-7020-5035-0.
5. "An approach to Early Arthritis". Pn.lifehugger.com. 12 January 2009. Archived from the original on May 27, 2010.
6. <http://www.arthritis.org/about-arthritis/types/rheumatoidarthritis/symptoms.php>.
7. <http://www.arthritis.org/about-arthritis/types/rheumatoidarthritis/diagnosing.php>.
8. Saag KG, Teng GG, Patkar NM, et al. (2008). "American College of Rheumatology 2008 recommendations for the use of nonbiologic and biologic disease-modifying antirheumatic drugs in rheumatoid arthritis". *Arthritis Rheum.* 59 (6): 762–84. PMID 18512708. doi:10.1002/art.23721.
9. Reference: Too CL, Muhamad NA, Ilar A, Padyukov L, Alfredsson L, Klareskog L, Murad S, Bengtsson C, MyEIRA Study Group. Occupational exposure to textile dust increases the risk of rheumatoid arthritis: results from a Malaysian population-based case–control study. *Annals of the rheumatic diseases.* 2016 Jun 1;75(6):997-1002. <http://ard.bmj.com/content/75/6/997.short>.

