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## “A Comparative Study To Assess The Knowledge And Attitude On Prevention And Management Of Tuberculosis Among The Population In Selected Urban And Rural Area Of District Fatehabad (Haryana)”

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### Abstract

A comparative study to assess the knowledge and attitude on prevention and management of tuberculosis among the population in selected urban and rural area of district Fatehabad. In this study the urban population knowledge was adequate in only 4% of the participant where as in rural population it was adequate in only 0% of the participant. In urban population the attitude was found to be good for 56% and in rural population it was 45%. Study concludes that the general population should be sensitized with the knowledge of tuberculosis and its management to enhance their understanding and to have a better attitude.

**Materials and Methods:** A descriptive design was taken for this study. The study was conducted in urban and rural area district, Fatehabad. The sample size was 100. The convenient sampling was used. Data were collected from the urban and rural people to assess the level of knowledge by using structured knowledge questionnaire. The collected data were tabulated and analysed by descriptive and inferential statistics.

**Results:** The result shows in urban population knowledge was adequate in only 4% of the participant where as in rural population it was adequate in only 0% of the participant. In urban population the attitude was found to be good for 56% and in rural population it was 45%. Study concludes that the general population should be sensitized with the knowledge of tuberculosis and its management to enhance their understanding and to have a better attitude.

**Conclusion:** Study concludes that the general population should be sensitized with the knowledge of tuberculosis and its management to enhance their understanding and to have a better attitude.

**Keywords:** comparative, Assess, Association, knowledge, Attitude, Population, Tuberculosis, Urban, Rural.

## INTRODUCTION

-Tuberculosis is an infectious disease known to have existed from ancient times. The disease has been perpetuated and maintained in the human population. It represents a dynamic balance between man and mycobacterium tubercle bacilli, the disease primarily affects lungs and causes pulmonary tuberculosis. It can also affect meninges, intestine and bones. Even Today in INDIA, two deaths occur every three minutes from TB. Major challenges to control TB in India include poor primary health care infrastructure in rural areas of many states, unregulated private health care leading to widespread irrational use of first line and second line anti TB drugs, spreading HIV infection, poverty, lack of political will and corrupt administration. A collaborative effort is in progress between NTCP and National Rural Health Mission which is a reform initiative whose goal is to improve primary health care in rural areas. In addition to this, NTCP has established several initiatives to coordinate with the private sector and the Indian Medical Association IMA to improve TB care. Despite the government's wide ranging and ambitious TB programme, TB treatment is not followed uniformly across the private sector resulting in the rise of drug resistance.

46(46%) were male. According to educational status of urban population, majority of sample

49(49%) had completed higher secondary, 29 (29%) had completed graduation, 22(22%) had completed up to primary level, and 0(0%) had

## METHODOLOGY

Research methodology is a plan of research study that gives guidelines that gives guidelines, the research study process and enables in the systematic data collection logical data organisation. Evaluative research approach will be considered appropriate for the present study. The research design adopted for the study is descriptive research design. The sample size was 100. The study was conducted in rural area of Samain and urban area Tohana at district Fatehabad. In this study non probability convenient sampling technique was adopted to select the sample.

## RESULT

Age wise distribution of study sample revealed that the higher percentage of urban population was 53(53%) was in 41-50 years of age 30(30%) where in 20-30 years of age 17(17%) where in 31-40 years of age. In rural population the majority of sample 55(55%) where in 41-50 years of age 26(26%) where in 20-30 years of age 19(19%) where in 31-40. With regards to the gender of urban population reveals that majority of sample 62(62%) were female, 38(38%) were male. In rural population majority of sample 54(54%) were female and

no formal education. In rural population majority of sample 39(39%) had no formal education. In rural population majority of sample 39(39%) had no formal education, 28(28%) had completed graduation, 25(25%) had completed higher

secondary 8(8%) had completed upto primary level. In term of occupation of urban population shows that majority of sample 38(38%) public employee, 33(33%) are others, 27(27%) are private employee and 2(2%)

Were unemployed. In rural population, majority of sample were 40(40%) are others, 34(34%) public employee 19(19%) are private employee, 7(7%) were unemployed. In terms of monthly income of urban population majority of sample 57(57%) were earns upto Rs 10000-20000 per month and 36 (36%) income was Rs 20,000-30,000 per month and 7(7%) income was Rs 30000 per month. In rural population, majority 61(61%) earns upto Rs 10000-20000 per month and 32(32%) income was 20000-30000 per month and 7(7%) income was >30000 per month. According to religion in urban population majority of sample 79(79%) were Hindu, 6(6%) muslim 10(10%) Sikh 5(5%) others. In rural population majority of sample 77(77%) were Hindu 4(4%), Muslim 14(14%) Sikh 5(5%) others. Regarding dietary pattern pattern of urban population majority of sample 66(66%) were vegetarian and 34(34%) were non vegetarian. In rural population majority of sample 73(73%) were vegetarian and 27(27%) was non vegetarian. In terms of family type in urban population majority of sample, 61(61%) were nuclear family 27(27%) were joint family, 12(12%) were extended family. In rural population, majority of sample 49(49%) were

joint family 37(37%) were nuclear family 14(14%) were extended family. In terms of source of information in urban population majority of sample 79(79%) had information from personal observation 13(13%) from mass media and 8(8%) have information from news paper and books in rural population majority of sample 85(85%) had information from personal observation. In urban population 49% had inadequate knowledge, 47% had moderate knowledge and 4% had adequate knowledge in rural population 75% had inadequate knowledge and 25% had moderate knowledge regarding prevention and management of tuberculosis. In urban 56% had positive attitude and 44% had negative attitude with score. In rural population 45% had positive attitude and 55% had negative attitude regarding prevention and management of tuberculosis. In urban population the mean and SD for knowledge score was 11.232.998 and in rural population mean and SD knowledge score was 9.062.309. The urban population had more knowledge than rural population regarding prevention and management of tuberculosis. The mean difference of knowledge score of urban and rural population was found higher significant with paired t test.

**Assosiation between level of knowledge regarding prevention and management of tuberculosis  
among rural population**

| S.N<br>o | Demographic Variables                                                                   | Inade<br>quate<br>know<br>ledge | Moderate<br>Knowledge | Chi Value | df | P value |
|----------|-----------------------------------------------------------------------------------------|---------------------------------|-----------------------|-----------|----|---------|
| 1        | Age in Years<br>A. 20-30 years<br>B. 31-40 years<br>C. 41-50 years                      | 17<br>13<br>45                  | 9<br>6<br>10          | 3.084     | 4  | 0.214NS |
| 2        | Gender<br>A. male<br>B.Female                                                           | 33<br>42                        | 13<br>12              | 1.483     | 2  | 0.487NS |
| 3        | Educational Status<br>A. primary<br>B. secondary<br>C.Graduation<br>D.Illitrate         | 4<br>21<br>24<br>26             | 4<br>4<br>4<br>13     | 6.905     | 4  | 0.075NS |
| 4        | Occupation<br>C. A.Unemployed<br>B. Public employee<br>C. Private employee<br>D. others | 6<br>24<br>18<br>27             | 1<br>10<br>1<br>13    | 5.929     | 3  | 0.115NS |
| 5        | Monthly Family Income<br>A.10001-20000<br>B.20001-30001<br>C.>30000                     | 48<br>23<br>4                   | 13<br>9<br>3          | 1.880     | 2  | 0.407NS |
| 6        | Religion<br>A. Hindu<br>B. Muslim<br>C. Sikh<br>D. others                               | 59<br>1<br>12<br>3              | 18<br>3<br>2<br>2     | 6.899     | 3  | 0.075NS |
| 7        | Dietary Habits                                                                          | 57                              | 16                    | 1.370     | 1  | 0.242NS |

|    |                         |    |    |       |   |         |
|----|-------------------------|----|----|-------|---|---------|
|    | Vegetarian              | 18 | 9  |       |   |         |
|    | Non vegetarian          |    |    |       |   |         |
| 8  | Type of Family          |    |    |       |   |         |
|    | A. Joint                | 37 | 12 | 1.305 | 2 | 0.521   |
|    | B. Nuclear              | 26 | 11 |       |   |         |
|    | C. extended             | 12 | 2  |       |   |         |
| 9. | Source of knowledge     |    |    |       |   |         |
|    | A. Personal observation | 62 | 23 | 1.992 | 2 | 0.369NS |
|    | B. Mass media           | 8  | 2  |       |   |         |
|    | C. News paper           | 5  | 0  |       |   |         |

**Assosiation between level of knowledge regarding prevention and management of tuberculosis among urban population.**

| S.N | Demographic Variables | Inadequate knowledge | Moderate Knowledge | Chi Value | df | P value |
|-----|-----------------------|----------------------|--------------------|-----------|----|---------|
| 1   | Age in Years          | 14                   | 16                 | 10.52     | 2  | 0.214NS |
|     | D. 20-30 years        | 7                    | 7                  |           |    |         |
|     | E. 31-40 years        | 28                   | 24                 |           |    |         |
|     | F. 41-50 years        |                      |                    |           |    |         |
| 2   | Gender                |                      |                    |           | 1  | 0.487NS |
|     | E. male               | 23                   | 14                 | 3.294     |    |         |
|     | B.Female              | 26                   | 33                 |           |    |         |
| 3   | Educational Status    |                      |                    |           |    |         |
|     | D. primary            | 13                   | 8                  | 3.065     | 2  | 0.075NS |
|     | E. secondary          | 22                   | 24                 |           |    |         |
|     | C.Graduation          | 14                   | 15                 |           |    |         |
|     | D.Illitrate           | 26                   | 13                 |           |    |         |
| 4   | Occupation            |                      |                    |           |    |         |
|     | F. A.Unemployed       | 1                    | 1                  | 5.904     | 4  | 0.115NS |

|    |                         |    |    |       |   |         |
|----|-------------------------|----|----|-------|---|---------|
|    | F. Public employee      | 20 | 17 |       |   |         |
|    | G. Private employee     | 16 | 11 |       |   |         |
|    | H. others               | 12 | 18 |       |   |         |
| 5  | Monthly Family Income   |    |    |       |   |         |
|    | A.10001-20000           |    |    |       |   |         |
|    | B.20001-30001           | 30 | 26 | 12.30 | 6 | 0.407NS |
|    | C.>30000                | 17 | 18 |       |   |         |
|    |                         | 2  | 3  |       |   |         |
| 6  | Religion                |    |    |       |   |         |
|    | E. Hindu                | 40 | 36 | 4.105 | 6 | 0.075NS |
|    | F. Muslim               | 2  | 3  |       |   |         |
|    | G. Sikh                 | 4  | 6  |       |   |         |
|    | H. others               | 3  | 2  |       |   |         |
| 7  | Dietary Habits          | 32 | 30 | 2.170 | 2 | 0.242NS |
|    | Vegetarian              | 17 | 17 |       |   |         |
|    | Non vegetarian          |    |    |       |   |         |
| 8  | Type of Family          |    |    |       |   |         |
|    | D. Joint                | 14 | 13 | 2.667 | 4 | 0.521   |
|    | E. Nuclear              | 29 | 28 |       |   |         |
|    | F. extended             | 6  | 6  |       |   |         |
| 9. | Source of knowledge     |    |    |       |   |         |
|    | D. Personal observation | 38 | 37 | 1.679 | 4 | 0.369NS |
|    | E. Mass media           | 6  | 7  |       |   |         |
|    | F. News paper           | 5  | 3  |       |   |         |

**Assosiation between level of attitude regarding prevention and management of tuberculosis among urban population.**

| S.N<br>o | Demographic Variables                                                                   | Positi<br>ve<br>Attitu<br>de | Negative<br>attitude | Chi Value | df | P value |
|----------|-----------------------------------------------------------------------------------------|------------------------------|----------------------|-----------|----|---------|
| 1        | Age in Years<br>G. 20-30 years<br>H. 31-40 years<br>I. 41-50 years                      | 18<br>10<br>28               | 12<br>7<br>25        | 1.446     | 2  | 0.792NS |
| 2        | Gender<br>I. male<br>B.Female                                                           | 18<br>38                     | 20<br>24             | 1.853     | 1  | 0.173NS |
| 3        | Educational Status<br>G. primary<br>H. secondary<br>C.Graduation<br>D.Illiterate        | 1<br>10<br>30<br>16          | 12<br>19<br>13       | 1.544     | 2  | 0.462NS |
| 4        | Occupation<br>I. A.Unemployed<br>J. Public employee<br>K. Private employee<br>L. others | 1<br>21<br>12<br>22          | 1<br>17<br>15<br>11  | 3.025     | 3  | 0.388NS |
| 5        | Monthly Family Income<br>A.10001-20000<br>B.20001-30001<br>C.>30000                     | 31<br>20<br>5                | 26<br>16<br>2        | 1.739     | 2  | 0.691NS |
| 6        | Religion<br>I. Hindu<br>J. Muslim<br>K. Sikh<br>L. others                               | 43<br>4<br>6<br>3            | 43<br>4<br>6<br>3    | 1.453     | 3  | 0.929NS |
| 7        | Dietary Habits<br>Vegetarian                                                            | 37<br>19                     | 29<br>15             | 1.902     | 1  | 0.986NS |

|    |                         |    |    |       |   |         |
|----|-------------------------|----|----|-------|---|---------|
|    | Non vegetarian          |    |    |       |   |         |
| 8  | Type of Family          |    |    |       |   |         |
|    | G. Joint                | 14 | 13 | 1.589 | 2 | 0.745NS |
|    | H. Nuclear              | 36 | 25 |       |   |         |
|    | I. extended             | 6  | 6  |       |   |         |
| 9. | Source of knowledge     |    |    |       |   |         |
|    | G. Personal observation | 46 | 33 | 1.295 | 2 | 0.523NS |
|    | H. Mass media           | 7  | 6  |       |   |         |
|    | I. News paper           | 3  | 5  |       |   |         |

**Assosiation between level of attitude regarding prevention and management of tuberculosis among rural population.**

| S.N<br>o | Demographic Variables | Positive<br>Attitude | Negative<br>attitude | Chi Value | df | P value |
|----------|-----------------------|----------------------|----------------------|-----------|----|---------|
| 1        | Age in Years          | 13                   | 13                   | 1.368     | 2  | 0.832NS |
|          | J. 20-30 years        | 8                    | 11                   |           |    |         |
|          | K. 31-40 years        | 24                   | 31                   |           |    |         |
|          | L. 41-50 years        |                      |                      |           |    |         |
| 2        | Gender                |                      |                      |           | 1  | 0.778NS |
|          | M. male               | 20                   | 26                   | 1.080     |    |         |
|          | B.Female              | 25                   | 29                   |           |    |         |
| 3        | Educational Status    |                      |                      |           |    |         |
|          | J. primary            | 5                    | 3                    | 1.358     | 3  | 0.781NS |
|          | K. secondary          | 11                   | 14                   |           |    |         |
|          | C.Graduation          | 12                   | 16                   |           |    |         |
|          | D.Illiterate          | 17                   | 22                   |           |    |         |
| 4        | Occupation            |                      |                      |           |    |         |
|          | L. A.Unemployed       | 3                    | 4                    | 2.059     | 2  | 0.949NS |
|          | N. Public employee    | 14                   | 10                   |           |    |         |
|          | O. Private employee   | 9                    | 20                   |           |    |         |
|          | P. others             | 19                   | 21                   |           |    |         |



|    |                                                                                  |                   |                   |       |   |         |
|----|----------------------------------------------------------------------------------|-------------------|-------------------|-------|---|---------|
| 5  | Monthly Family Income<br>A.10001-20000<br>B.20001-30001<br>C.>30000              | 25<br>17<br>4     | 37<br>15<br>3     | 1.998 | 3 | 0.357NS |
| 6  | Religion<br>M. Hindu<br>N. Muslim<br>O. Sikh<br>P. others                        | 35<br>3<br>5<br>2 | 42<br>1<br>9<br>3 | 1.665 | 2 | 0.573NS |
| 7  | Dietary Habits<br>Vegetarian<br>Non vegetarian                                   | 30<br>15          | 43<br>12          | 1.576 | 2 | 0.197NS |
| 8  | Type of Family<br>J. Joint<br>K. Nuclear<br>L. extended                          | 23<br>17<br>5     | 26<br>20<br>9     | 1.665 | 2 | 0.750NS |
| 9. | Source of knowledge<br>J. Personal observation<br>K. Mass media<br>L. News paper | 39<br>5<br>1      | 46<br>5<br>4      | 1.390 | 2 | 0.499NS |

**Level of knowledge regarding prevention and management of tuberculosis among urban and rural population**

| level of knowledge          | Urban              |           | Rural             |           |
|-----------------------------|--------------------|-----------|-------------------|-----------|
|                             | f                  | %         | f                 | %         |
| <b>Inadequate knowledge</b> | <b>49</b>          | <b>49</b> | <b>75</b>         | <b>75</b> |
| <b>Moderate knowledge</b>   | <b>47</b>          | <b>47</b> | <b>25</b>         | <b>25</b> |
| <b>Adequate knowledge</b>   | <b>4</b>           | <b>4</b>  | <b>0</b>          | <b>0</b>  |
| <b>Score Range</b>          | <b>7-21</b>        |           | <b>4-14</b>       |           |
| <b>Mean SD</b>              | <b>11.23 2.998</b> |           | <b>9.06 2.309</b> |           |

## Level of attitude regarding prevention and management of tuberculosis among urban and rural population

| level of Attitude                  | Urban              |           | Rural              |           |
|------------------------------------|--------------------|-----------|--------------------|-----------|
|                                    | f                  | %         | f                  | %         |
| <b>Strongly positive attitude</b>  | <b>0</b>           | <b>0</b>  | <b>0</b>           | <b>0</b>  |
| <b>Positive attitude</b>           | <b>56</b>          | <b>56</b> | <b>45</b>          | <b>45</b> |
| <b>Negative attitude</b>           | <b>44</b>          | <b>44</b> | <b>55</b>          | <b>55</b> |
| <b>Strongly negative attiotude</b> | <b>0</b>           | <b>0</b>  | <b>0</b>           | <b>0</b>  |
| <b>Score range</b>                 | <b>27-51</b>       |           | <b>24-46</b>       |           |
| <b>mean</b>                        | <b>38.41 6.243</b> |           | <b>35.85 6.362</b> |           |

## DISCUSSION AND CONCLUSION

The present study is concluded with implications to nursing field, limitation and delimitations with study design, methods and recommendations for the future. This will help the urban and rural people to gain knowledge and improve attitude in the area of general information regarding tuberculosis ,knowledge related symptom and causes of tuberculosis, general information of life style modification knowledge related to prevention and management of tuberculosis.

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