# **ORIGINAL ARTICLE**

# Knowledge, attitude & practices towards tuberculosis: Comparison between community and Health care professionals

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#### **ABSTRACT**

**Background:** Tuberculosis disease is one of the major global health problems. Community participation can help reduction in this disease.

**Aim:** To compare the knowledge, attitude and practice towards tuberculosis between community and health care professionals.

**Methodology:** The study got approved by ethical review board. This cross sectional survey was conducted from January to June 2017, for the community and health care professionals (50 participants each) of King Edward Medical University, Lahore to compare the knowledge, attitude and practice towards tuberculosis. A validated questionnaire was used. The study participants were included by non-probability convenient sampling. The participants were explained regarding study protocol and their consent was obtained. The study participants were interviewed according to the questionnaire. Data were entered in SPSS 20 for statistical analysis. Chi square test was applied to see the differences between responses.

**Results:** The study participants consisted of 50 doctors and 50 community members. There was statistically significant difference in knowledge between doctors and community for tuberculosis disease epidemiology, its spread, available treatment facilities and preventive measures. However, there was not statistically significant difference between the responses in attitude and practices about TB.

**Conclusion:** Findings from this study are indicative of differences in gap in knowledge, attitudes, and practices associated with tuberculosis in a resource-limited locality. There is significant gap in knowledge associated with tuberculosis between doctors and community. The community needs to be educated more for tuberculosis and its prevention.

Keywords: Knowledge, Attitude, Practice, Tuberculosis, Community, Health care professionals

# INTRODUCTION

Tuberculosis remains a major global health problem. WHO has estimated 8.7 million cases and 1.4 million deaths globally, with major burden in in Asia (60%) and Africa (24%)1.

Low income countries like Pakistan face TB as one of the major burden. Poor nutrition, HIV, smoking, poverty and lack of awareness are important contributory factors<sup>2,3</sup>. Decreased access to health facilities<sup>4,5</sup> reduce financial resources<sup>6</sup> and less knowledge about the disease epidemiology in community are major determinant affecting the health seeking behavior of patients<sup>7</sup>.

Unfortunately, this is misconception of public that influences the social behaviors. Due to these facts, mass awareness about the TB is mandatory which would initiate community participation<sup>8</sup>. Based on this review, this study was planned to compare the knowledge, attitude and practice towards tuberculosis between community and health care professionals.

# **METHODOLOGY**

The study got approved by ethical review board. This cross sectional survey was conducted from January to June 2017, for the community and health care professionals (50 participants each) of King Edward Medical University, Lahore compare to knowledge, attitude and practice towards tuberculosis. A validated questionnaire was used. The study participants were included by nonprobability convenient sampling. The participants were explained regarding study protocol and their consent was obtained. The study participants were interviewed according to the questionnaire. Data were entered in SPSS 20 for statistical analysis. Chi square test was applied to see the differences between responses.

# **RESULTS**

The study participants consisted of 50 doctors and 50 community members. Males were 58% male and 53% of the study population was between 15-30 years of age. Among total, 98% population belonged to urban areas. Majority (68%) of the participants were graduates (Table I).

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Table I: Demographic characteristics

| rabio ii Borriograpino eri | Frequency | %age |  |  |  |
|----------------------------|-----------|------|--|--|--|
| Male                       | 58        | 58.0 |  |  |  |
| Female                     | 42        | 42.0 |  |  |  |
| Age (years)                |           |      |  |  |  |
| 15 to 30 years             | 53        | 53.0 |  |  |  |
| 30 to 45 years             | 29        | 29.0 |  |  |  |
| above 45 years             | 18        | 18.0 |  |  |  |
| Residence                  |           |      |  |  |  |
| Rural                      | 02        | 02.0 |  |  |  |
| Urban                      | 98        | 98.0 |  |  |  |
| Profession                 |           |      |  |  |  |
| Doctor                     | 50        | 50.0 |  |  |  |
| Community                  | 50        | 50.0 |  |  |  |
| Education                  |           |      |  |  |  |
| Uneducated                 | 15        | 15.0 |  |  |  |
| Primary                    | 7         | 7.0  |  |  |  |
| Secondary                  | 4         | 4.0  |  |  |  |
| Higher secondary           | 6         | 6.0  |  |  |  |
| Graduation                 | 68        | 68.0 |  |  |  |

Table II: Comparison of knowledge about Tuberculosis among doctors versus community

|                |                  | ofession             | P value            |  |
|----------------|------------------|----------------------|--------------------|--|
|                | Doctor           | Community            |                    |  |
|                | ard about tuber  | rculosis?            |                    |  |
| Yes            | 50               | 50                   |                    |  |
|                |                  | h with blood, Night  | sweats, Weight     |  |
| loss and Feve  |                  |                      |                    |  |
| Yes            | 40               | 33                   | 0.02               |  |
| No             | 10               | 16                   |                    |  |
| Not sure       | 0                | 1                    |                    |  |
| Can TB be tra  | ansmitted?       |                      |                    |  |
| Yes            | 50               | 45                   | 0.02               |  |
| No             | 0                | 5                    |                    |  |
| Not sure       | 0                | 0                    |                    |  |
| Air droplets a | re cause of TB   | transmission         |                    |  |
| Yes            | 45               | 43                   | 0.03               |  |
| No             | 5                | 2                    |                    |  |
| Not sure       | 0                | 5                    |                    |  |
| TB is bacteriu | ım               |                      |                    |  |
| Yes            | 50               | 25                   | 0.001              |  |
| No             | 0                | 16                   |                    |  |
| Not sure       | 1                | 9                    |                    |  |
| TB is prevent  | able             |                      |                    |  |
| Yes            | 47               | 36                   | 0.001              |  |
| No             | 3                | 9                    |                    |  |
| Not sure       | 0                | 5                    |                    |  |
| TB is curable  |                  |                      |                    |  |
| Yes            | 50               | 47                   | 0.02               |  |
| No             | 0                | 3                    |                    |  |
| Not sure       | 0                | 0                    |                    |  |
| Treatment of   | TB is free of co | ost                  |                    |  |
| Yes            | 48               | 14                   | 0.002              |  |
| No             | 2                | 24                   |                    |  |
| Not sure       | 0                | 12                   |                    |  |
| Do you know    | about BCG?       |                      |                    |  |
| Yes            | 46               | 6                    | 0.001              |  |
| No             | 4                | 40                   |                    |  |
| Not sure       | 0                | 4                    |                    |  |
| Does BCG pr    | event TB?        |                      |                    |  |
| Yes            | 44               | 34                   | 0.014              |  |
| No             | 6                | 16                   |                    |  |
| Not sure       | 0                | 0                    |                    |  |
| Do you thing   | that sputum ar   | nalysis is an import | ant diagnostic too |  |
| Yes            | 48               | 36                   | 0.01               |  |
| No             | 2                | 14                   |                    |  |
| Not sure       | 0                | 0                    |                    |  |

There was statistically significant difference in knowledge between doctors and community for tuberculosis disease epidemiology, its spread, available treatment facilities and preventive measures. (Table II). However, there was not statistically significant difference between the responses in attitude and practices about tuberculosis (Table III & IV).

Table III: Comparison of attitude about Tuberculosis among

| doctors versus community   |         |             |      |          |         |
|--|---------|-------------|------|----------|---------|
| Attitude   |         | Profession  |      |          | P value |
|  | Do      | octor       | С    | ommunity |         |
| I consider myself at risk for TB                                 |         |             |      |          |         |
| Strongly agree   |         | 31          |      | 36       | 0.145   |
| Agree  |         | 17          |      | 12       |         |
| Disagree   |         | 2           |      | 2        |         |
| Strongly disagree  |         | 0           |      | 0        |         |
| Not sure   |         | 0           |      | 0        |         |
| All TB infected pe   | rsons s | hould be is | olat | ted      |         |
| Strongly agree   |         | 23          |      | 21       | 0.01    |
| Agree  |         | 21          |      | 22       |         |
| Disagree   |         | 6           |      | 1        |         |
| Strongly disagree  |         | 0           |      | 2        |         |
| Not sure   |         | 0           |      | 4        |         |
| Our Government has responsibility of taking preventive           |         |             |      |          |         |
| measures for TB  |         |             |      |          |         |
| Strongly agree   |         | 38          |      | 43       | 0.04    |
| Agree  |         | 12          |      | 7        |         |
| Disagree   |         | 0           |      | 0        |         |
| Strongly disagree  |         | 0           |      | 0        |         |
| Not sure   |         | 0           |      | 0        |         |
| Do you think that infection control is important step to prevent |         |             |      |          |         |
| TB   |         |             |      |          |         |
| Strongly agree   |         | 45          |      | 42       | 0.01    |
| Agree  |         | 5           |      | 5        |         |
| Disagree   |         | 0           |      | 0        |         |
| Strongly disagree  |         | 0           |      | 0        |         |
| Not sure   |         | 0           |      | 3        |         |

Table IV: Comparison of practices about Tuberculosis among doctors versus community

| Practice  | Prof   | P value   |       |  |  |
|---|--------|-----------|-------|--|--|
|   | Doctor | Community |       |  |  |
| Would you go to health facility if you thought you have TB?   |        |           |       |  |  |
| Yes   | 50     | 34        | 0.02  |  |  |
| No  | 0      | 14        |       |  |  |
| Not sure  | 0      | 2         |       |  |  |
| Would you prefer going to hakeem/traditional healer if you ever have TB?                            |        |           |       |  |  |
| Yes   | 50     | 29        |       |  |  |
| No  | 0      | 21        | 0.002 |  |  |
| Not sure  | 0      | 0         |       |  |  |
| Will you take all the pills prescribed by the doctor?   |        |           |       |  |  |
| Yes   | 50     | 49        | 0.4   |  |  |
| No  | 0      | 1         |       |  |  |
| Not sure  | 0      | 0         |       |  |  |
| Will you be able to complete the course of pills if you ever have TB, no matter how long it may be? |        |           |       |  |  |
| Yes   | 50     | 48        | 0.2   |  |  |
| No  | 0      | 2         |       |  |  |
| Not sure  | 0      | 0         |       |  |  |
| Do you practice the preventive method for TB to avoid having TB?                                    |        |           |       |  |  |
| Yes   | 50     | 44        | 0.5   |  |  |
| No  | 0      | 6         |       |  |  |
| Not sure  | 0      | 0         |       |  |  |

#### DISCUSSION

Present study had statistically significant difference in knowledge between doctors and community for tuberculosis disease epidemiology, its spread, available treatment facilities and preventive measures. The results from our study favor that general community was familiar with TB disease. This finding agrees with previous studies.<sup>7,8</sup> This is in contrast from the results of earlier study conducted from Pakistan9, the community had less awareness TB.<sup>10,11</sup> This behavior of awareness subsequently has impact on patients' attitude towards health-seeking behavior and practices. awareness of masses has decisive impact on policy makers. These findings from our study are in accordance with studies by Melaku et al7 and from Pakistan<sup>12</sup>. This level of awareness in our study is in consistence with findings by Deribew et al<sup>12</sup>.

Present study had no statistically significant difference between the responses in attitude and practices about tuberculosis. In contrast to earlier studies,<sup>5</sup> the respondents from our study favored to go to health facility for TB treatment. This shows current success of TB control program.

This study has certain limitations. The study was single centered, and was conducted on small sample size, the result of which cannot be generalized. More qualitative studies are needed to address this important issue on larger scale.

#### CONCLUSION

Findings from this study are indicative of differences in gap in knowledge, attitudes, and practices associated with tuberculosis in a resource-limited locality. There is significant gap in knowledge associated with tuberculosis between doctors and community. The community needs to be educated more for tuberculosis and its prevention.

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**Conflict of interest**: The authors declare that there is no conflict of interests.

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