



# Knowledge and attitudes of religious leaders and congregants regarding TB in Khomas region, Namibia

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## ABSTRACT

### Background

Tuberculosis (TB) is one of the deadliest diseases in the world. People still have a poor understanding of the causes, treatment and prevention of TB. Religious leaders are influential stakeholders in the prevention and treatment of diseases as humanity is guided by religious doctrines they believe. Therefore, understanding religious leaders and congregants' knowledge and attitudes towards TB is fundamental. This study was aimed at estimating the knowledge and attitudes of religious leaders and congregants regarding TB in the Khomas region, Namibia.

### Methods

A descriptive cross-sectional design was used to conduct this study among 299 participants. A consecutive sampling technique was used to select all the religious leaders in the Khomas region. Snowball sampling was used to select the congregants. The data was analysed using Moon Stats 2018 version 2.0 software. Descriptive statistics (frequencies and percentages) was applied.

**Results:** The majority of the participants (80.87%) had adequate knowledge and a good attitude about the causes, treatment and prevention of TB despite their religious differences.

**Conclusion:** Religious leaders had adequate knowledge and a good attitude towards people with TB and that was the same sentiment shared with religious congregants. This adequate knowledge and good attitude towards TB could be instrumental in the prevention of TB.

**Keywords:** Knowledge, Attitudes, Religious leaders, Congregants, Tuberculosis

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## INTRODUCTION

The World Health Organisation WHO [1] reported that the COVID-19 pandemic had a negative impact on the progress of TB prevention and control. During the year 2019, there was an increase in the number of new TB infections followed by a sharp decrease in 2020 in the six WHO regions with the highest reductions in South-East Asia and Western Pacific regions accounting to 84% of the total reduction globally[1]. In 2020, a total of 4.8 million people were diagnosed with pulmonary TB of which 59% were bacteriologically confirmed. This percentage was an increase from 57% recorded in 2019.

The 2020 report included a provisional assessment of the impact of the COVID-19 pandemic on TB services[2]. The treatment and prevention of TB has been made difficult by the eruption of COVID-19. It brought an extra burden in the progress towards targets in the fight against TB [3]. The most immediate consequence of the large drop in the number of people newly diagnosed with TB in 2020 is an increase in the number of people who died from TB in 2020, at all levels; global, regional and country. The COVID-19 pandemic has reversed years of global progress in reducing the number of people who died from TB in 2020, at all levels; global, regional and country level. Globally, in 2020, there was an estimated 1.3 million to 1.4 million deaths [1]and [4] as well as [5] supported the same claim.

TB is a leading cause of death worldwide[4]. Globally, it is estimated that 9.9 million people (95% CI: 8.9–11 million) will have TB by 2020, which corresponds to 127 cases (CI: 114–140) per 100 000 population[5]. Geographically, the highest rates of TB cases in 2020 were in the WHO regions of South-East Asia (43%), Africa (25%) and the Western Pacific (18%), with lower rates in the Eastern Mediterranean (8.3%), the Americas (3.0%) and Europe (2.3%)[1]. The 30 countries with a high burden of disease accounted for 86% of all estimated cases worldwide, and eight of these

countries accounted for two-thirds of the total number of global cases: India (26%), China (8.5%), Indonesia (8.4%), Philippines (6.0%), Pakistan(5.8%), Nigeria (4.6%), Bangladesh (3.6%) and South Africa (3.3%)[4]. Religious institutions were also involved in the provision of human services such as health care. Many of the first health institutions were established by religious communities[6].

Religious leaders influence the promotion of health behaviours because of their persuasive power, their weekly audience, their experience of healthy lifestyles and their ability to take health-related action[7]. Religious leaders can improve the healthy lifestyles of their followers[8]. Gichuru, Kombo [9] argued that the involvement of religious leaders in a health-related issues is associated with greater follower participation. The importance relating to improving TB awareness and tracing the attitudes regarding TB have been connected to religious leaders as they are considered icons in the process[10].

Accordingly, religious leader involvement was associated with progressive health outcomes. As a result, health organisations are therefore encouraged to work with religious leaders and faith-based groups. It is important to note that the authority of religious leaders can persuade communities to accept or reject health interventions[11]. For example, religious leaders can be persuaded by health organisations such as United Nations Children's Fund (UNICEF) to accept vaccinations[12]. Ruijs, Hautvast [13]pointed out that clergy in Mexico are concerned about the health needs of their congregants. Rivera-Hernandez [14] also explained that clergy can provide counselling and support for health issues. Religious leaders have a positive impact on the well-being and health of their followers[15]. Berkely Centre for religion [16] examined the role of churches in combating the HIV/AIDS epidemic. As a result, Hassan, Olukolade [17] pointed out that churches occupy a crucial cultural and social position.

According to Keshet and Popper-Giveon [18] religious institutions contribute to the overall health of society, mainly because religious leaders have a positive influence on community mores. Gill and Carlough [19] highlighted that partnerships between the public health sector and religious institutions are a strategy to combat infant mortality. In the context of TB treatment, trained religious community health workers can play an important role in treatment adherence because of the trust the community places in them [20]. The trust that the community places in religious leaders is consistent in Namibia. Statistics show that almost the entire population professes some form of religion as religious leaders can therefore be a good source of information for TB prevention and treatment [21]. Matakanye, Tshitangano [22] pointed out that partnership with religious organisations is important in TB prevention. It is important to note that the leaders of the groups have influence in society. They have the power to enable or reduce stigma against people with tuberculosis by reaching out to people in need. It is important to note that the consequences of stigmatising people with tuberculosis are very costly, as a person may stop tuberculosis treatment and then become infectious and further transmit the disease [2]. Williams and O'Leary [23] and Gaughan, Ayoubkhani [24] agree that collaboration with religious leaders is critical to the success of TB prevention programmes.

It is important to recognise that personal beliefs influence prevention, treatment, recovery and the experience of illness [25]. As a result, patients experience fewer psychological problems when they connect with God in the hope of healing and release, and most report that their spiritual beliefs give them strength and comfort [26]. According to Chang and Cataldo [5], religiosity has been shown to provide stability, support and guidance in times of stress in order to find meaning and purpose in life. Spiritual counselling can develop effective ways of coping with mental health [7]. In a study by Cartwright [27] it was noted that religious beliefs were found to be associated with greater life satisfaction. Attending religious services led to greater satisfaction.

Spiritual well-being was positively related to quality of life, less depression, anxiety and avoidance [28]. Low TB awareness and health behaviours in communities that use traditional healers rather than biomedical approaches, and the perceived stigma of TB, impede TB control under the DOTS strategy [29]. There are studies that look at the behaviours, knowledge, attitudes and practices of pastoralist communities in relation to TB [26] and report low community awareness of TB, preference for visiting traditional healers and the relationship between visiting traditional healers and treatment [15]. It remains to be seen whether all these mentioned strengths of religious leaders are relevant among congregants in the Khomas region in Namibia.

### STUDY OBJECTIVE

The objective of this study was to estimate the knowledge and attitudes of religious leaders and congregants regarding TB in Khomas region, Namibia.

### MATERIALS AND METHODS

A quantitative descriptive design was used for this study. This study has thus enabled the description of the knowledge and attitudes regarding TB among religious leaders and congregants in the Khomas region, Namibia. In this study, the researcher collected data from March 2020 to September 2020. The self-administered questionnaire method was developed on knowledge and attitude and the questionnaire went through content validity. A pilot study was done with 5 religious leaders and these leaders were not part of the participants in the study.

After data collection, the data was cleaned to ensure completeness before being entered into Microsoft Excel. Data cleaning was done by removing spoiled questionnaires and nullifying spoiled answers given by respondents as well. The structured data were then exported to the Moon Stats 2018 version 2.0 software package for analysis. Descriptive statistics (frequencies and percentages) was used.

Results were used to describe the demographics of the participants, their knowledge and attitudes towards TB, and their TB prevention practices. The researcher read all the collected data to understand and become familiar with the content. Then the researcher created codes to structure the data. Finally, themes were created and exported to Moon Stats version 2.0 software for statistical analysis.

### Knowledge of TB

The participants were presented with questions to test their knowledge on the causes, mode of transmission and treatment of TB. The results are presented in table 1 (see Annexure 1). Participants in the study reflected a better knowledge of the causes of TB.

**Annexure 1:**  
**Participants' knowledge of the causes and treatment of tb (n=299)**

| Variables  | Frequency (n) | Percentage (%) | Cum percentage (%) |
|--|---------------|----------------|--------------------|
| <b>What causes TB?</b>   |               |                |                    |
| Bad luck/curse   | 1             | 0.34           | 0.34               |
| Bacteria (germs)   | 241           | 80.87          | 81.21              |
| Demons   | 0             | 0              | 0                  |
| Cold wind  | 1             | 0.34           | 81.54              |
| Smoking  | 44            | 14.77          | 96.31              |
| Malnutrition   | 2             | 0.67           | 96.98              |
| I do not know  | 9             | 3.02           | 100                |
| Missing cases  | 1             |                |                    |
| <b>How can a person get infected with TB?</b>                                  |               |                |                    |
| Through handshake  | 0             | 0              | 0                  |
| Through the air when the infected person coughs or sneezes                     | 292           | 97.99          | 97.99              |
| Through sharing food with a person infected with TB                            | 0             | 0              | 0                  |
| Through sharing clothes with a person infected with TB                         | 0             | 0              | 0                  |
| I do not know  | 6             | 2.01           | 100                |
| Missing cases  | 1             |                |                    |
| <b>What is the best treatment for TB?</b>                                      |               |                |                    |
| Herbal remedies  | 15            | 5.05           | 5.05               |
| Home remedies  | 2             | 0.67           | 5.72               |
| Praying/holy water   | 2             | 0.67           | 6.4                |
| Modern medicine  | 271           | 91.25          | 97.64              |
| I do not know  | 7             | 2.36           | 100                |
| Missing cases  | 2             |                |                    |
| <b>What are the dangers of stopping TB treatment before course completion?</b> |               |                |                    |
| Death  | 49            | 16.5           | 16.5               |
| Re-infection   | 49            | 16.5           | 33                 |
| Inability to cure infection  | 28            | 9.43           | 42.42              |
| Drug resistance  | 164           | 55.22          | 97.64              |
| I do not know  | 7             | 2.36           | 100                |
| Missing cases  | 2             |                |                    |

### Ethical approval

This study was approved by the Department of Health Studies' Research Ethics Committee of the University of South Africa, the Namibia Ministry of Health and Social Services Research Committee, the Council of Churches in Namibia and the Islamic much ethical considerations related to the field of medical research.

### Attitude of participants towards TB

This section explored the participants' attitude towards TB. Participants were asked to indicate on a Likert scale how much they agreed with the statements(See Annexure 2)

**ANNEXURE 2 Attitude of the participants towards TB (n=299)**

| Variables   | Strongly Agree<br>n (%) | Agree n<br>(%) | Not<br>sure n<br>(%) | Disagree<br>n (%) | Strongly<br>Disagree<br>n (%) | Missing cases<br>n (%) |
|---|-------------------------|----------------|----------------------|-------------------|-------------------------------|------------------------|
| Anyone can get TB   | 227<br>(76.95)          | 65<br>(22.03)  | 1<br>(0.34)          | 2 (0.68)          | 0                             | 4                      |
| TB is a serious issue in our religion                                 | 55 (18.77)              | 74<br>(25.26)  | 94<br>(32.08)        | 54 (18.43)        | 16 (5.46)                     | 6                      |
| I am afraid of a person infected with TB because they might infect me | 70 (23.97)              | 113<br>(38.70) | 29<br>(9.93)         | 70 (23.97)        | 10 (3.42)                     | 7                      |
| It surprises me when someone has TB                                   | 11 (3.74)               | 22<br>(7.48)   | 54<br>(18.37)        | 141<br>(47.96)    | 66<br>(22.45)                 | 5                      |
| I feel sad when someone has TB  | 80 (27.59)              | 128<br>(44.14) | 32<br>(11.03)        | 42 (14.48)        | 8 (2.76)                      | 9                      |
| I feel compassion for people with TB                                  | 120<br>(40.96)          | 140<br>(47.78) | 18<br>(6.14)         | 12 (4.10)         | 3 (1)                         | 6                      |
| I feel compassion for people with TB, but I stay away from them       | 50 (17.06)              | 88<br>(30.03)  | 47<br>(16.04)        | 82 (27.99)        | 26 (8.87)                     | 6                      |
| I am ashamed of a person with TB                                      | 6 (2.05)                | 13<br>(4.45)   | 54<br>(18.49)        | 125<br>(42.81)    | 94 (32.19)                    | 7                      |
| It makes me sad and hopeless to see a person with TB                  | 35 (12.07)              | 58<br>(20.00)  | 52<br>(17.93)        | 97 (33.45)        | 48 (16.55)                    | 9                      |
| I have no particular feeling towards a person with TB                 | 9 (3.06)                | 27<br>(9.18)   | 65<br>(22.11)        | 116<br>(39.46)    | 77 (26.19)                    | 5                      |
| I have a desire to help someone with TB                               | 154<br>(52.20)          | 98<br>(33.22)  | 26<br>(8.18)         | 13 (4.41)         | 4 (1.36)                      | 4                      |
| I reject people with TB   | 7 (2.27)                | 3 (1.02)       | 56<br>(18.98)        | 113<br>(38.31)    | 116<br>(39.32)                | 4                      |
| I support people with TB  | 141<br>(47.64)          | 114<br>(38.51) | 28<br>(9.46)         | 10 (3.38)         | 3 (1.01)                      | 3                      |
| It is an individual problem to get TB                                 | 18 (6.10)               | 26<br>(8.81)   | 70<br>(23.73)        | 100<br>(33.73)    | 81 (27.46)                    | 4                      |

## RESULTS

A total of 299 religious leaders and congregants participated in this study. The participants in this study were mainly young adults and adolescents aged 20 to 29 years, totalling 124 (41.61%), and between 30 to 39 years, totalling 125 (41.95%). There was only 1 participant (0.34%) in the 70 to 79 age group. Women dominated this study with 191 (63.88%) participants, compared to 108 (36.12%) men. There were 261 participants (87.58%) with higher education, while the lowest numbers were recorded for primary education and no formal education with an equal number of 2 (0.67%) participants each. Regarding marital status, 192 (64.65%) participants were single while 91 (30.64%) were married or living together and only 14 (4.72%) were also divorced and living together while 2 participants did not answer this question. Christianity was practised by 261 (87.29%) participants, while 34 (11.37%) were Muslims and 4 (1.34%) participants indicated that they did not practise any religion.

## DISCUSSION

Most of the participants in this study conflated predisposing factors to TB infection with causes of TB as they chose cold wind, smoking and poor diet as causes of TB. The fact that participants rejected that TB can be infected through handshakes, through sharing food with a person infected with TB, and through sharing clothes with a person infected with TB is a demonstration that participants' knowledge and attitudes on TB were sufficient despite their religious background. The findings are supported by that of Khan [12] that religion has been modernised in its curriculum and doctrine resulting to a better worldview of modern issues and trends. It has been also noted that participants had plutonic knowledge on the ways in which TB can be contracted by agreeing that one can be infected through the air when the infected person coughs or sneezes.

Regarding the treatment of TB, a large number of participants agreed that TB can be treated through herbal remedies. These findings are supported by a study of Jawaid [30] as they noted that through the use of herbals there is a possibility of treating TB.

Some participants also agreed that home remedies will be useful as treatment for TB. The patients had incorrect beliefs about the mode of transmission and practised an unhealthy lifestyle while on treatment. The findings are contrary to that of Luba, Tang [10] as they noted that home remedies cause procrastination leading to a lot of deaths. This is as a result of the doctrine that is associated with respect to the religious principles. Participants were of the view that praying or holy water could treat TB. Medically, this a dangerous ideology which calls for engagement and more awareness in the religious settings on the treatment of TB [31]. However, participants also demonstrated the knowledge about the medical medicine as a treatment which concurs with a study by Hassan, Olukolade [17]. In addition Matakanye, Tshitangano [22] as they noted that medical treatment is the most effective ways of the treatment of TB. Noé [26] concretised these findings by concluding that patients with TB-related knowledge, beliefs and practices are important for improving public health education about TB. The findings of this current study are reinforced by those of Koh [32] who described the importance and role of religious leaders in the prevention and treatment of tuberculosis in Nigeria, hence the importance of their attitude towards the disease. Although in this study it was inconclusive in the responses on whether religious leaders were active in TB awareness activities, the solution and framework to educate and sensitise congregants on TB lies in the religious doctrines that are derived from the attitude of humanity. The community therefore relies on religious leaders; they can be vital in providing health education to their congregants, as supported by Xenikou [33] that Nigerian government officials acknowledge that citizens listen to religious leaders more than government officials. Participants were having good knowledge about the implications of stopping the treatment of TB as they chose death, re-infection, inability to cure infection and drug resistance. The findings are supported by that of Mulokoshi [25] that a default in the medication and poor adherence to treatment will lead to detrimental effects of TB.

The participants also agreed that anyone can get TB and TB is a serious issue in their religion. It has been expressed by the participants that they were afraid of people with TB as they fear to be infected. Such a fallacy belief could lead to discrimination of people with TB especially in religious gatherings[11]. The findings are supported by Gichuru [29] who noted that religious people are circled by religio-centrism, which usually results in discrimination, and the effects are more sound to less advantaged people and patients with TB are not excluded. Religious barriers such as being surprised when someone has TB shows that there is a need for extensive awareness of TB in religious settings so as to improve the knowledge and attitudes of congregants. This is supported by a study of Mulokoshi [25] who recommended the need for awareness campaigns through the religious leaders for TB. A positive response from participants on the attitude of people with TB has been noted as they agreed that they express compassion and feel sad and have the desire to help people with TB, although a certain margin of participants were of the view that they would stay away from them in as much as they express compassion.

This study revealed that most participants were unsure of their religion's position on TB as they were unsure whether their religion considered TB as a serious disease or not. The results of the study show that not all participants were afraid of the person with TB, rather most believed that they simply practiced social distancing but were not afraid of them. The results of the study generally show a positive attitude of the participants towards TB patients. The results show that there is low phobia, high compassion, low stigma and high involvement among the participants and a positive attitude towards TB patients due to the religious affiliation governing the participants' attitude. Despite the nature of the current findings, a study by Hassan, Olukolade [17] shows that religious leaders strive to influence the attitudes and practices of their congregants. This suggests, therefore, that religion is the fundamental basis of beliefs and attitudes, emotions and physiological functioning of humanity that suspend or sustain rationality[22]. Chakaya, Khan [4] alluded that to improve attitudes towards

TB, there should be training for religious leaders on proper practices and treatment seeking, which could greatly improve TB campaigns promoted by them. WHO [1] further indicated that with regard to TB treatment, trained health workers from the religious community can play a role in enhancing treatment adherence because of the trust the community places in them. Therefore, it can be inferred from the findings of this study that the trust the community has in religious leaders is consistent with Khomas region, Namibia, which means that religious leaders can be a good source of information for TB prevention and treatment. Participants in this study said nothing about their participation and their religious leaders in TB prevention activities. However, a study Gichuru, Kombo [9] incited that Nigerian, religious leaders had a unique characteristic, namely interfaith cooperation that facilitates better coordination of TB plans.

## RECOMMENDATIONS

This study recommends a further study on the knowledge and attitudes of TB among religious leaders and congregants in all the other regions of Namibia as well as the influence of African traditional religion on attitudes towards TB prevention and treatment.

## CONCLUSION

This study concluded that religious leaders and congregants in the Khomas region in Namibia have a good knowledge and attitude regarding TB. This has a positive implication on TB prevention and care in this region since religion is pivotal in prevention and treatment due to their influence it has in the communities.

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