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# Knowledge, Myths and Misconceptions of Ghanaians about Tuberculosis

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**Abstract** Systematic review was performed to evaluate Ghanaian's knowledge, myths and misconception about tuberculosis and their impact on the country. Several themes were observed, and fear of infection appears to be the most common cause of stigma. Some regions and groups of people in Ghana record low level of knowledge about tuberculosis. The study revealed certain community norms that lead to stigmatization of tuberculosis victims, and are thought to hinder TB control in Ghana. TB is believed among some Ghanaians as a spiritual disease, whiles others also believe that the cause of the disease is an ancestral punishment and this imparts an attitude of not seeking medical care. A major setback to successful TB control in many Ghanaian societies is the stigma attached to the disease. Because of fear of infection, most Ghanaian community members harbor the view that TB patients should not mingle freely with people in the society, and they are also deprived of many public and social amenities. The cause of TB should not be misunderstood and treated as a mystery. The disease is curable; therefore health care providers and stakeholders should act as destigmatizers and empower the people by reaching them with mass health education to allay their fears about it. Comprehensive literature review on the topic was conducted from ScienceDirect, PubMed, and Google Scholar.

**Keywords** *Knowledge; Myths; Misconceptions; Tuberculosis; Ghana*

## 1. Introduction

Most studies on TB in Ghana have focused on the effects of patient-related factors, healthcare-provider factors and multidrug resistance of the disease in the country [1]. Little have been done on knowledge, myths and misconceptions which determine people's attitude and behavior towards the disease [2]. The disease is curable and preventable, and despite many years of efforts into studying drug-resistance and treatment, it still persists and is one of the leading causes of morbidity and mortality in the country [3]. Inadequate knowledge of people and low level of treatment protocol by some health professionals as well as their roles in DOTS contribute to the failure of TB control in the country [4]. These, coupled with recent surge of MDR-TB (multi-drug resistance tuberculosis)

challenges point to the fact that public health research intervention to prevent spread of the disease is the ultimate. Dr Mario Raviglione, Director of the WHO Stop TB Department, warned that the number of people becoming infected with MDR-TB (multidrug-resistant tuberculosis) has risen considerably. He added that too few patients are being diagnosed and treated [5]. Apart from multidrug-resistance, other associated obstacles to the successful implementation of TB programs in Ghana have been identified as shortage of trained staffs, lack of political commitment and weak laboratory services [6]. The neglect of myths, misconceptions and low knowledge of people about TB has been for so long, and is one of the shortcomings of researches on this aspect in Ghana. This has become one major setback to the fight of the disease in many societies in the country [7, 8].

Myths and misconceptions vary from tribe to tribe in Ghana; every tribe has its peculiar kind of myths and misconceptions different from others which they hold on to. These differences and diversities further thwart and complicate health program efforts in the country [9].

We therefore intended to examine existing research on tuberculosis and to use the observation to assess knowledge, myths and misconceptions about the disease in Ghana and the extent to which these factors have affected TB prevention in the country.

This review is a prospect to effectively control TB under the current strategy, and the potential to increase epidemiological impact through additional preventive intervention. The review suggests that, while the current TB strategy is intended to cure patients and save lives, there are a number of the Ghanaian population who hold on to myths and misconceptions about TB, and some who have little or no access to health care services. Moreover, qualified health care professionals needed to provide these services are very limited in number. One of the effective interventions to these deprived groups is to research into and empower them to overcome their myths and misconceptions through health information, education and communication. The findings will be a high complement in planning long-term epidemiological targets for TB control interventions to reduce peoples' vulnerability to the disease [10]. The results can further be used by health planners for better healthcare provision in terms of targeting religious and traditional leaders to become health partners in all efforts on advocacy campaign on TB prevention.

## 2. Knowledge, Myths and Misconceptions about TB in Ghana

### 2.1. Knowledge about TB

There is a big vacuum on research about Ghanaian’s knowledge on tuberculosis because existing researches have focused on causes of multi-drug resistance and biomedical aspects of TB [7].

The 2008 GDHS (Ghana Demographic and Health Survey) collected information on people’s knowledge and attitudes concerning tuberculosis. The results indicated that people’s knowledge that TB can be cured is generally lower among the younger individuals, those with less education and those in the lower wealth category. This observation was made among major tribes in some regions in the country. Since data was collected from the entire population, the result is purely authentic and represents the true nature of the Ghanaian population [11].

A research conducted among cattle owners and herdsmen in the Dangme-West district of Ghana shows lack of knowledge about bovine tuberculosis. The survey assessed the prevalence of tuberculosis infection in cattle, and it established a prevalence of 50% among the people due to lack of knowledge on the disease and its transmission in that locality [12]. A statement issued by the CEO of Global Media Foundation (GLOMEF), Raphael Godlove Ahenu, during the 2012 world TB day in Ghana iterated that lack of regular public health education on the disease has led to low or no knowledge about the disease among some people in the country. He cited a survey which was

conducted by GLOMEF, a human rights media advocacy organization that showed this result in the country [13]. A research focus group discussion with some TB patients in Ghana indicated that the patients were shocked, scared, confused and cried at their positive test results because they thought once they have had the infection death was inevitable. Others said they wanted to commit suicide. Besides, diagnosis and initiation of treatment was delayed because most of these patients attributed their symptoms to some other diseases and spent extended periods in their communities on self-medication all due to low knowledge about the disease [14].

### 2.2. Myths and Misconceptions about TB

Myths and misconceptions about TB is a great barrier to efforts aimed at addressing stigmatization of infected and affected persons of the disease. It is very important to understand such drivers of myths and misconceptions for improving national control and preventive intervention efforts on information, education and communication (IEC).

People in the Ghanaian society recognize that TB patients are a risk to civilization so they used stigmatization to keep out the enduring from their midst. When the cause of disease is not well understood and is treated as a mystery, it tends to elicit fear from others [15] (*Songtag, 2001*).

There is a mistaken ongoing belief among some Ghanaians that tuberculosis is a spiritual disease, and therefore does not need any medical attention. One big challenge of the activities of TB control programs in Ghana is myths and misconceptions of infected persons. These negative dispositions result in delays in health seeking and stigmatization. Further effects of these misconceptions are shame, concealment of status and fear [9]. It was observed from this review that myths and misconceptions about a disease can be very complex and more “pathogenic” than the disease itself. Their effects pose a great threat not only to health, but also other daily life essentials become greatly impeded; and the effect has no racial or continental differences. For instance, it has been perceived in Pakistan that TB is a very dangerous, infectious and incurable disease. This perception has imposed many social consequences such as stigmatization and social isolation of TB patients and/or their families, diminishing marriage prospects for young TB victims, and sometimes for their family members. TB in one of married partners may lead to divorce, with its associated result of broken homes that affect children. Native perceptions and beliefs have rendered some TB patients there to fear, and often deny the diagnosis and reject the treatment. Male and female TB patients both face many social and economic problems, but female patients are far more affected because broken engagements seem to occur more often against female patients. There is therefore urgent need for a health education campaign to convince our societies that tuberculosis is curable. All health care providers and stakeholders should act as destigmatizers [16].

### 2.3. Differences in Myths and Misconceptions

It has been discovered in Ghana that there are significant differences in myths and misconceptions by ethnic background. While it is very difficult to figure out specific triggers of these differences, cultural epidemiologists [17, 18] agree that the findings, interpretations and conceptions of some diseases can be shaped by the views of the dominant group. For instance, among the Akan tribe in Ghana, there is a belief that TB could arise from ancestral punishment due to lack of care provided to family members who have suffered and died from TB, hence the name *Nsaman wa* (ghost cough). Again in the Volta Region of Ghana, TB is known as *yomokpe* (grave yard), which to them suggest that once you are infected, death was unavoidable or inevitable [9]. These myths and misconceptions might have occasioned the ethnic differences. Care must therefore be taken by health professionals to avoid disproportionate focus when planning health interventions; in that behavioral change communication messages on TB must be separated according to individual and communal need characteristics so that the greatest impact will be made on our societies.

### 2.4. Myths and Misconceptions about Childhood TB

The world strategy for prevention of childhood tuberculosis is vaccination with BCG at birth. The national EPI policy is that each child should receive one dose of BCG at birth. The essence is to stimulate the child's body response mechanism to produce specific antibodies of the TB organism against any natural future infection. Although vaccination coverage rates in Ghana are very appreciable, and though there is growing effort to raise awareness on the disease, childhood tuberculosis (TB) remains a neglected disease in many resource-limited settings in Ghana. In part this reflects some operational difficulties on outreach programs, lack of visibility in official reports by managers, as well as wrong perceptions of the people that children tend to develop mild disease, contribute little to disease transmission, and do not affect epidemic control (*Ben J., Marais*) [19]. This situation and many other factors need redress between health professionals, partners and the community at large. Research into these factors is very key to identify reasons for their existence and the level of impact these factors have on the Ghanaian community.

### 2.5. Stigmatization of TB Victims

Some TB patients have bitterly stated various forms of negative attitudes and behaviors of household and close contacts, which begin immediately their positive diagnosis status, became known to others. Even their close family members would avoid sharing household items with them, and items used by the patient are always separated from the household's, which results in isolation of the patient within the family. Because of the stigma attached to TB, some patients attribute and explain their symptoms to some non-stigmatizing conditions such as common cold, or malaria, just to avoid or reduce the contempt of others [20, 21]. One other negative effect of stigmatization of TB victims in Ghana is isolation from other members of the community; and this can substantially impact economic opportunities. For instance stigmatization has led to prohibition of some infected individuals from selling goods in public markets and attending social events [22]. The impact is that fear of stigma leads families to hide the cause of death of a member who dies of TB, even when such information might be useful in planning TB screening sessions for the whole community [23].

### 2.6. Stigmatization by Ghanaian Health Professionals

Activities and attitude of health professionals can be a basis of stigmatization against those suffering from TB in the society. A research conducted in one urban district in Ghana revealed that many TB patients had suicidal tendencies due to certain humiliating attitudes and behaviors of health workers. Most patients indicated that these attitudes and behaviors of health professionals towards them were demeaning [14, 24]. We can be sure that health system will not achieve its intended purpose when people begin to lose trust in it.

One other thing that is worth noting is the use of isolation wards by most hospitals, and the observation citizens make that some doctors and nurses frequently use mask and gloves when attending to TB patients can lead to stigmatization of the disease in the eyes of community members. Besides, the humiliating behaviors and attitudes of health workers such as open avoidance of TB patients and denial of full burial rites can send a message to the entire citizens in the community that TB is a shameful disease. It has been noted that the main reason for stigmatizing attitudes and behaviors of both health professionals and the general community members towards people with TB is fear of infection [25]. It is important to point out that although there is a real risk of infection with TB when one spends prolonged periods with untreated TB patients, especially the smear positive ones, it is worth noting that the patients are no longer infectious two weeks after commencement of treatment. The legitimate fear of infection, which usually starts after diagnosis, is often exaggerated, causing health workers to be shouting at their TB clients who are already receiving treatment to cover their mouth when coughing and also stand at a distance when talking to them. In this case when

stigmatizing behaviors of community members are seen to be endorsement by the attitudes and practices of health professionals, it will enhance the stigma they attach to the disease, since stigma is dependent on social, economic and political power to be effective [26]. It is probable that people in the community with very obvious symptoms suggestive of having TB may fail to report to the health facility, for fear of being stigmatized. This can impact implications for the TB control program in the country, because people who are fearful of being stigmatized by health-related conditions mostly do not prevention behaviors or seek medical care at all [27].

Health workers can learn from their colleagues in other health facilities whose commendable positive attitudes and behavior have motivated their clients to complete TB treatment [28]. There is a need for intensification of education on TB and regular refresher courses and re-training of health staff in TB control and management. In fact community perception about the disease will change when health professionals are seen to be treating TB patients as 'normals' [8].

### 2.7. TB Control Program in Ghana

Health is a number one priority of the government of Ghana. The Minister of Health in Ghana had stated that Tuberculosis (TB) detection centres are to be established in vulnerable communities in 2014 in an effort to step up the fight against the disease; that the TB detection centres would ensure early detection and management of the disease considered to be a national security threat and a major cause of death, particularly among people living with HIV if unattended to [29]. The general framework within which TB is currently fought in Ghana is the worldwide Stop TB strategy. This strategy identifies communities and individuals affected by the disease to be empowered with mass information on the disease. These include information on mode of transmission, status disclosure, availability of cure and community participation in TB control programs [30].

### 2.8. Limitation with Past Studies in Ghana

More than 70% of studies on TB since 1947 in Ghana had focused on the biomedical aspects of tuberculosis (*Amo-Adjei*) [7]. Gandy and Zumla [2] have also criticized such approach to TB research where disproportionate emphasis is placed on biomedical paradigm. Lonnroth et al., [10] has recently argued for an approach to TB research that harmonizes biomedical and socio-cultural paradigms in order to attain greater impacts on control measures.

## 3. Conclusion

The World Health Organization is making great efforts, and is committed to averting the burden of tuberculosis in the whole world wide. In spite of these efforts, the disease still remains a global burden. In Ghana, high level of myths and misconception have led to stigmatization of infected persons; rendering the efforts of TB control program a real challenge. Myths and misconceptions always exist in the general Ghanaian population, but they vary by spatial, demographic and socioeconomic characteristics. To avert this trend, the gap between tradition and health must be bridged, and also behavioral change communication messages on TB must be separated according to individual and communal need characteristics so that the greatest impact will be made.

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