



THE ESSENTIAL ROLE OF SOCIAL WORK IN THE TREATMENT OF TUBERCULOSIS

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ABSTRACT

Tuberculosis has been a world epidemic which has claimed thousands of lives in the world with India taking the lead. The disease is curable and only when compliance with effective medication and follow-ups are ensured. However, it has been challenging to control the spread and commitment to medication for those who are affected and infected. A cross sectional study that involved 160 patients at Dakshina Kannada District of Karnataka found out that patient compliance is negatively affected by factors such as alcohol and substance abuse, the fear of losing a job, and patient illiteracy. Accurate diagnosis and management of chest TB is also important. The hospitals need to deploy changes which include having a social work department. The department should use the ecological perspective to work with victims with cases of non-compliance, alcoholism, homelessness, loneliness, and joblessness. The content of interviews with patients revealed and identified problems for future research.

KEYWORDS : Tuberculosis, DOTS strategy, Trend of tuberculosis cases, Treatment outcome, Barriers to treatment adherence, Dakshina Kannada District of Karnataka, India

Background

Tuberculosis (TB) is an infectious disease caused by *Mycobacterium Tuberculosis* (MTB), transmitted through air or ingestion of foods. The condition is both preventive and curable. The diagnosis of chest TB is based on identifying the presence of acid fast-bacilli (AFB) on the patient samples, such as sputum. The Zeiehl-Neelsen (ZN) staining and molecular assessment of the bacilli strains are the preferred methods of TB diagnosis. Chest radiography is often used in sputum-negative patients. Due to its accuracy and sensitivity, chest imaging is increasingly becoming a preferred method of diagnosing chest TB, underscoring the role of radiologists and chest disease doctors in the management of TB patients. The cure of is contingent on compliance with the required treatment modalities. According to Duarte et al. (116), TB treatment is inextricably influenced by a combination of social, economic, and psychological factors that impede the compliance of TB patients to their prescribed medication. The resurgence of TB is increasingly becoming a cause of concern globally. Some patients' fails to comply, resulting in high cases of TB burden in certain regions of the world, with India accounting for the highest number worldwide (Sharma, 2017).

According to Krishnan, Mini, and Aravind (2019), chest TB is divided into primary and post-primary infections. Primary infections are contracted through exposure to *M. tuberculosis* of previously uninfected patients. These infections are increasingly becoming prevalent in previously non-endemic areas, with approximately 23% of all adult cases. The pleura and lung parenchyma are the most affected organs. Post-primary TB often occurs in previously infected patients are a result of re-exposure or re-emergence of latent infections. The patterns and severity of the infections are dependent on the immunity of the patients and the organ of localization. Imaging of patients is important to determine the pattern and extent of localization of the infections. This is diagnosis is often performed by chest physicians.

Social, economic and psychological factors negatively affect compliance with TB treatment, and they pose the major obstacle that TB control programs worldwide should deal.

According to Krishnan et al. (2019), the issue is more predominant in developing countries such as India. In many cases in these regions, the patients' problems precede their priority for treatment and desire for recovery. Diefenbach-Elstob (70) point out that for some patients, the hazards they encounter in their daily endeavors may overshadow the threats posed by TB infections. Psychiatric and mental health conditions may prevent a patient from understanding the severity of their condition or the need to seek and adhere to their medication. Thus understanding the factors that influence compliance to TB treatment in Dakshina Kannada District of Karnataka will help to address the issues to improve patient compliance to TB treatment and improve health outcomes.

OBJECTIVE

- To evaluate the prevalence of TB infections Dakshina Kannada District of Karnataka, India.
- To assess the role of chest physicians and physiotherapists on the clinical outcomes of TB patients.
- To assess the role of social workers in ensuring the compliance of TB patients to treatment.

METHODOLOGY

This was a cross sectional study that followed a thematic framework procedure. 160 patients visiting the Karnataka district health facility were involved in the study. The patient records were analyzed with the consent of the participants, and in line with the ethical requirements of the institution. The patients were tracked from consultation with their care giver, their diagnosis, treatment, and prognosis over a six month period. The patients were also interviewed on their compliance to medication following diagnosis. These included questions on the socio-economic factors that influenced compliance. The interview also included the patients' perception on how their care and compliance could be improved.

Results

Among the study participants, 34 patients were diagnosed with chest TB, 12 were diagnosed with malaria, 16 with

diabetes, and the others with bacterial and viral conditions such as food poisoning and flu. Half of the respondents proved to lack knowledge about the standard treatment duration and any repercussions in case they halt treatment. Some other patients confessed how they feared to lose their jobs in case their employers got to know about their diagnosis. Other patients were too ill to work or lack some time to get jobs due to the TB treatment procedures, which are time-consuming. Only a few exceptions could spare time to attend their regular follow-up for treatment for the distance seemed closer and convenient for them. Other respondents rarely got enough food which called for stress and that hopeless feeling. Another critical factor was the lack of support for the patients to adhere to medication. Patients who lacked the social support admitted to feeling stigmatized, had medication side effects, and eventually prolonged duration of treatment.

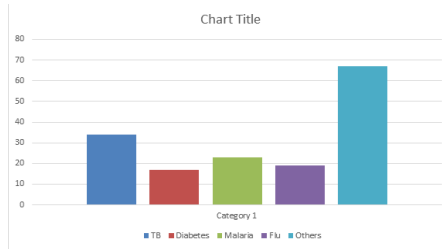


Chart 1: Patient Distribution at Kannada District Hospital

DISCUSSION

Medical social workers play a vital role to help patients and their families to cope with the emotional and social responses to TB disease and treatment. There is schism between the relationships of the Indian patients' education level to their health status, particularly in Dakshina Kannada district. In that case, it is crucial to better understand the causes which are directly linked with adverse health outcomes (Gebreweld n.p). The medical workers have a role to play in identifying the patients at risk of the adverse outcomes and subsequently develop the most appropriate interventions.

Health workers should identify the patients susceptible of adverse health outcomes associated with TB and subsequently develop the most effective interventions. The patients should be provided with treatment literacy entailing accurate information concerning the science behind TB disease and treatment. Patient involvement makes them more responsible for their care as they develop a better understanding of their condition. Patient education also makes them proactive in demanding for their rights in case they did not receive proper care. People in Some parts of India, precisely Dakshina Kannada District of Karnataka, are ignorant about TB symptoms, and thus delays in seeking medication at early stages (Nacarapa et al., 2020). These patients sometimes ignore the TB treatment procedures, thus having high cases of the disease and the resultant mortality rates (Andrade et al. 2018, p34). Denial as well is rampant non-compliance in these regions are due to stigmatization by the misinformed communities.

Factors Affecting Compliance Alcohol and Substance Abuse

Both alcohol and substance abuse have been the biggest reason for medication non-compliance, with India being the biggest victim of both. Alcohol impairs the judgment of the patient, making them likely to forget taking their drugs. Laxmeshwar et al. (77) note that these patient are susceptible to developing side effects that may subsequently result in resistance of the bacilli to medication Studies suggest that substance abuse is an impediment to TB treatment and care for it triggers non-compliance. Defaulting the prescribed medication may eventually lead to the acquisition of multi-

dug resistant TB (Aldridge, 2020). Shrestha et al. assert that taking alcohol is associated with homelessness which both leads to TB treatment default.

Joblessness and I "Feel Better" Assumptions

Lastly, there were also cases of fears of job security; where some people dread disclosing their diagnosis and losing their jobs. For others, jobs are too involving that they lack time keeping up with their medication. Others stop taking medication when they regain energy and slightly recover after taking the drugs for some time.

Role of Physiotherapist in the TB treatment

Alcohol and substance abuse TB victims have a big issue to follow their medication carefully. According to Matteelli et al. (2018), healthcare workers such as physiotherapists and psychological counselors need to be aware of the potential effects of alcohol and substance abuse of compliance and the physical safety of patients. Rachlis et al. (2018) also suggest that physicians and social health workers ought to ensure that they investigate whether their patients are alcohol and drug dependent. This evaluation helps to determine any indications of those behaviours because that will help the physician to focus their treatment to those drug-addicted patients. A physiotherapist can also help in cases of any TB patients who have high secretion load; respiratory compromise or either have a functional or neurological impairment. However, it is not essential to call for physiotherapists for those patients who have pulmonary TB.

According to Gehlert (6), the DOTS program is recommended for its effectiveness in achieving better TB control through proper interventions of improve diagnosis of alcohol and substance abuse. The Department of Health ought to implement the World Health Organizations' DOT strategy. DOT short course technique ensures adherence to medication by the patients. Gehlert (8) assert that DOT has been successful in many clinics, and it supports and backs-up the TB patients for the treatment phase, which goes for about six to eight months while directly observed to take their medication within the facility.

Chest Physicians

Chest physicians also have a role to play in the treatment of drug-resistant tuberculosis. The doctors should put more efforts and access the compliance of the Chest Physicians (CP) to the guidelines set for treating drug-resistant tuberculosis (DR TB). The Central TB division (CTD) is responsible to control TB activities and should update the physicians on the nearest facility that offers DST, DOTS and any change of policies. The chest disease doctor plays a vital role in the surveillance of TB and should observe TB treatment. He is much involved in the TB prevention and control.

In addition, the doctors should prescribe the correct drugs as the solution for managing MDR. Efforts should be put in place to prevent MDR from emerging through treating susceptible TB. We should ensure that the drugs are taken accordingly as well as availing the right doses for TB. For instance counterfeit and the poor-quality drugs as anti-TB may cause DR TB development and amplification. In that case, doctors ought to use quality assured second-line anti-TB drugs which are provided by DOTS-Plus programs. The department should ensure diagnosis and treatment services are followed as well as emphasizing on the DOT to control TB.

CONCLUSION

Chest TB is highly prevalent in communities. The use of accurate and reliable methods of diagnosis, as well as the adherence to treatment is imperative in curbing the increasing number of infections. Significant barriers for TB treatment

adherence are social, economic, and psychological factors. The specific factors identified are illiteracy, stigma and lack of support, side effects from drug abuse, longer duration of treatment, alcoholism, and substance abuse. The fear of seeking diagnosis due to the possibility of losing a job and stigmatization depict the divide existing between social support and TB treatment. Healthcare and wellness should be the role of multidisciplinary efforts of primary physicians and social workers. There is need for these teams to collaborate and ensure they provide the required interventions for optimum patient outcomes.

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