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Original Research Article

Siddha medicine practitioners and their knowledge, attitude and practice about tuberculosis patients: an observational study in Tamil Nadu, India

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ABSTRACT

Background: Siddha medicine is one of the commonest alternative medicine among AYUSH (ayurveda, yoga and naturopathy, unani, siddha, homeopathy) medicine practiced in Tamilnadu, one of the southern states of India, where it originated originally. To assess the knowledge, attitude and practice of siddha medicine practitioners towards Tuberculosis, a leading infectious disease-causing increased mortality and morbidity in the country where world's one fifth of the diseased patients of tuberculosis live and how these alternative medicine practitioners are helping the national programme of eradicating TB in 2025 with their practice.
Methods: A Questionnaire was prepared regarding the symptoms, investigations, treatment of TB and about its knowledge of recent trend. One siddha medicine practitioner was randomly selected from the 32 districts of the state from the registry, interviewed and assessed.
Results: Out of the 32 siddha practitioners interviewed, 96% referred the tuberculosis patients to the nearby government hospitals for the antituberculous treatment but with the supportive siddha medicine. Regarding the awareness or update of the recent change in the TB regime and the national programme, only 10% of the siddha medicine practitioners were sensitised that too only those working in government hospitals.
Conclusions: Siddha medicine practitioners mostly referred the tuberculosis patients, but they are insisting on the supportive role of siddha medicine along with the standard anti tuberculous drugs for the general improvement of the patient. Also, the sensitisation programmes for these Siddha practitioners should be initiated for the better outcome of the RNTCP (Revised National Tuberculosis Control Programme), especially in the private setup.

Keywords: Siddha medicine practitioners, Tuberculosis

INTRODUCTION

World health organization's global tuberculosis report (2017) estimates the incidence of TB in India to be 27,40,000 but the total number of TB cases notified is 19,08,371 TB cases.[1] The framework of the post-2015 global tuberculosis strategy (End TB strategy) aims for 95% reduction in tuberculosis deaths (compared with 2015), 90% reduction in tuberculosis incidence rate (less than 10 tuberculosis cases per 100,000 population) and no affected families facing catastrophic costs due to tuberculosis in 2030.[2] National strategy plan 2017-2025 by revised national tuberculosis control programme has a vision of TB-Free India with zero deaths, disease and poverty due to tuberculosis and a goal to achieve a rapid decline in burden of TB, morbidity and mortality while working towards elimination of TB in India by 2025.[3] To achieve this not only allopathic medicine practitioners both in government and in private sector be targeted but also the alternative medicine practitioners should be

sensitized about the various aspects of tuberculosis. Here, in this study authors have included only the siddha medicine practitioners in the alternative medicine in a random sampling method and their knowledge, attitude and practice about tuberculosis were studied.

METHODS

One siddha medicine practitioner was randomly selected from each of the 32 districts in Tamilnadu from the siddha medical council registry. Inclusion criteria was being a siddha medicine practitioner. There were no exclusion criteria like gender preference, age criteria, holding post graduate degree or undergraduate degree, village or city practice, private or government practice was made. All of the randomly selected were interviewed with the standard questionnaire prepared regarding the clinical diagnosis, investigations, treatment, referral of the TB patients and knowledge about the pulmonary tuberculosis disease in the adult patients. This interview was done over a period of two months, October-November 2018 and the number of siddha medicine practitioners interviewed was 32 and the interview was done once at their work place during their time of preference. The results were analysed with help of Microsoft Excel 2008 at the end of all the interviews.

Table 1: Questionnaire regarding knowledge, attitude and practice of siddha medicine practitioners about tuberculosis.

Question	Yes	No

• Symptoms (when to suspect TB)
  • Cough duration,
  • Fever (Evening rise),
  • Loss of weight,
  • Loss of appetite,
  • Haemoptysis.		

• Investigations
  • Mantoux,
  • Sputum acid fast bacilli x2 smears,
  • Chest X-ray,
  • Computed tomography chest,
  • Newer investigation like (included in the govt. programme)
  • CBNAAT (cartridge based nucleic acid amplification test),
  • LPA (line probe assay),
  • Liquid culture for tuberculosis,
  • Drug sensitivity test.		

• Treatment • Siddha medicine/allopathy medicine		
• Referral		

• Sensitisation programme about
  • Change in regime from alternative day to daily regime,
  • Duration of anti-tuberculous treatment,
  • Notification of TB patients to the government,
  • knowledge about newer drug Bedaquiline for multidrug resistant TB and where and how it is given,
  • Knowledge about newer investigation like CB-NAAT (cartridge based nucleic acid amplification test), LPA (line probe assay), liquid culture, drug sensitivity test,
  • HIV (Human Immuno-deficiency virus) and diabetes mellitus screening for all the TB patients.		

RESULTS

Out of the 32 Siddha practitioners, mostly they were males (78%). Most of them were working in government hospitals and 63% were in the villages (Table 2 and Figure 1). The majority were in the 40-50 years age group. All of them responded well and expressed their opinion, that Siddha medicine would increase the immunity, general well being of the patient and decrease the adverse effects if given along with the regular antituberculous drugs from RNTCP.

Regarding the clinical diagnosis in the Questionnaire, 81% said that the cough duration of 15 days to 1 month they would suspect tuberculosis (Figure 2). This is not applying to the current RNTCP guidelines of TB

(Tuberculosis) suspect with two weeks cough duration. But regarding other symptoms of TB, all are familiar. When asked about the investigations they suggested to do Mantoux, sputum examination for Acid fast bacilli and Chest X-ray. Some of them (about 6) even suggested doing Computed Tomography Chest when in doubt. But the number of sputum samples to be sent for diagnosis of TB they are not clear, whether two or three samples to be sent. Almost all of them (96%) referred the diagnosed or suspected TB patients to the nearby government hospitals or pulmonologists. And all of them have added their Siddha medicine as a supportive treatment to increase the immunity, general well being and to decrease the adverse effects of Antituberculous drugs like hepatotoxicity. Only one said that she is getting mostly TB defaulters where she used to give Siddha medicine as treatment since the patients were asking for alternative medicine. Sensitization programmes about TB were attended only by 10% and rest of them (90%) were not aware of the programmes.

Table 2: Demographic details of the study.

Epidemiology		No. of siddha practitioners	%
Gender	Male	25	78%
	Female	7	21.8%
Age	30-40years	9	28%
	40-50years	23	71.8%
Place	Village	20	62.5%
	City	12	37.5%
Type of practice	Government	22	68.75%
	Private	10	31.25%

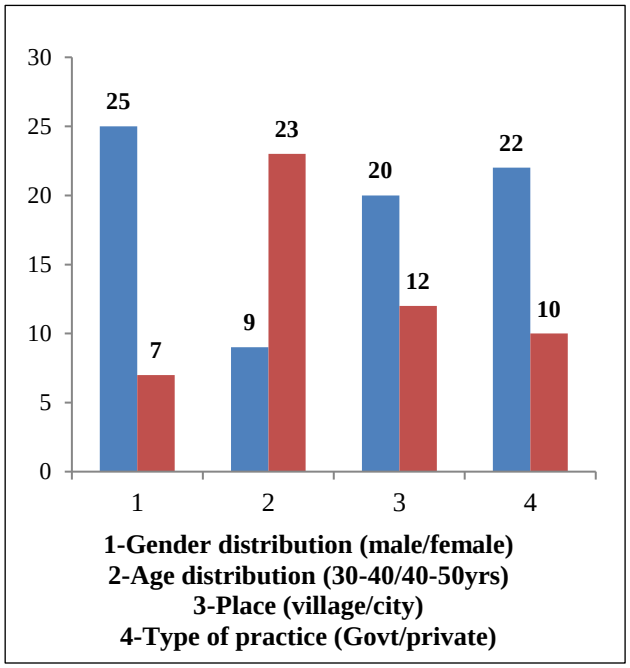

Figure 1: Schematic representation of Demographic details of the study.

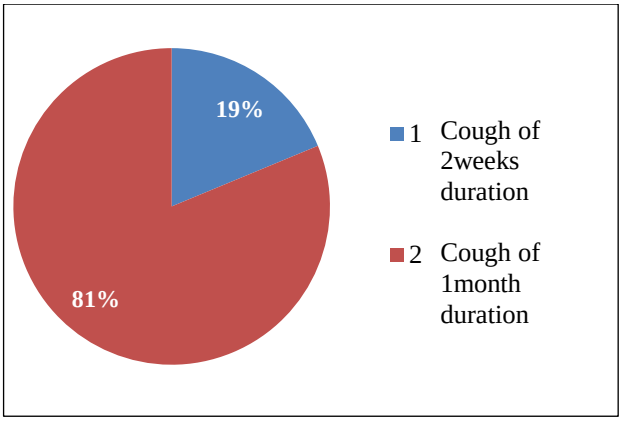

Figure 2: Knowledge about suspicion of tuberculosis with respect to cough duration among siddha practitioners.

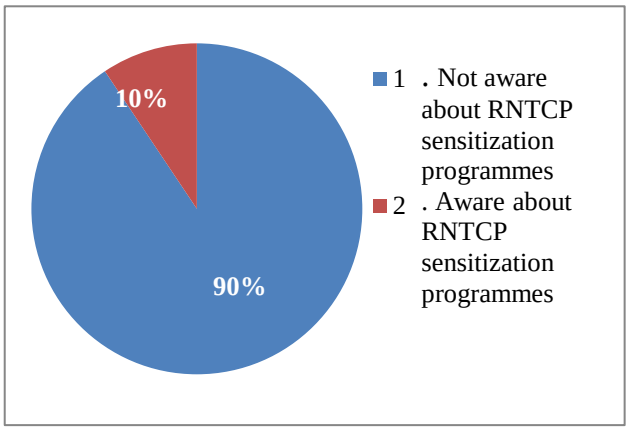

Figure 3: Awareness about RNTCP sensitization programme among Siddha practitioners.

DISCUSSION

People in all states of India used to get treated by all modalities of alternative treatment apart from allopathy medicine. Among the alternative medicine practiced in Tamilnadu, siddha medicine is the commonest since it originated from here. Tuberculosis is the most common infectious disease and we have 1/5th of world TB population in India. Our country has planned to eradicate TB in 2025.[3,4]

Since mostly all the siddha practitioners are referring the TB patients to the nearby government hospitals or the respiratory specialists, it is appreciable but their knowledge about TB should be improved through multiple sensitization programmes regarding the duration of symptoms and the change of regime now being implemented like thrice weekly to daily regime, fixed dose combination of the drugs for the better outcome of the RNTCP programme and for the betterment of the patients ultimately. A research paper on alternative medicine funded by Bill and Melinda Gates foundation strongly encourage the integration of these integrated medical professionals in programs for controlling TB in

India by allowing access to reduced cost diagnostic services, facilitating relationships with chest physicians and the RNTCP and enabling them to guide patients through the course of treatment.[5]

Proper surveillance about the patients when they go to alternative medicine should be done. Here in this study only siddha medicine practitioners were studied. The number of TB suspects referred by the AYUSH providers increased from year 1 to year 2 showing an increasing trend in number of referrals from AYUSH. This was achieved after the repeated training to the AYUSH providers done over a period of two years done in thirty districts in six high burden states (Bihar, Punjab, Haryana, Karnataka, Maharashtra and Rajasthan) have been sensitized through modular trainings in order to develop and enhance their abilities in TB diagnosis and treatment, to improve their referrals and also to engage them as community DOTS (Directly Observed Treatment) providers.[6]

Many problems like irrational and excessive use of certain drugs, under use of microscopy for sputum examination, over relying on X-rays for diagnosis, lacking awareness about change in treatment protocols and varied prescription practices among private practitioners can be improved by proper training and sensitization programmes for them.[7] Another study conducted in Uttar Pradesh, India in 2012 also emphasizes the urgent need for the continued education for the private practitioners since most of them did not follow the national programme RNTCP guidelines.[8] Both of these studies were done on allopathy private practitioners but the message it implies applies to alternative medicine practitioners also that sensitization programme is needed for the success of the national programme to eradicate TB.

Also, their suggestion regarding adding siddha medicine as supportive medicine to all TB patients should be studied. A study where Ayurvedic medicine, one of the other alternative medicine is studied for adjunct therapy with anti-tuberculous treatment in the management of pulmonary tuberculosis study based on adjunct therapy of Ayurvedic medicine with anti-tubercular drugs on the therapeutic management of pulmonary tuberculosis.[9] Even the cytotoxic activity of herbal formulations on *Mycobacterium tuberculosis* was studied in a study carried out in National Institute of Siddha, Chennai, India in 2016 and they found that their formulations have some anti tuberculous activity.[10] Another study focuses the effect of citrus oils from the medicinal plants native of India for antituberculous activity.[11]

CONCLUSION

For the national programme RNTCP to achieve its goal of eradicating the most infectious disease, Tuberculosis, involving all sorts of measurements like training of alternative medicine practitioners like siddha medicine who are more in the state is one of the crucial steps to be taken. Also, the use of their medicine as a supportive treatment for antituberculous treatment need to be considered and studied for the betterment of the patients to cure the disease effectively and to prevent the spread of the disease.

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