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Research Article

A Study on knowledge, attitude and practice among practitioners of alternative Systems of medicine regarding existing National Programme on Tuberculosis

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Abstract
Background: Effective TB control is hampered by the introduction of mycobacteria that are resistant to medications used to treat TB, which has grown to be a serious global public health issue. When symptoms start to appear, a significant portion of the population first seeks advice from alternative systems of medicine, pharmacies and unlicensed doctors. The objective of this study was to evaluate the knowledge, attitudes, and practices of AYUSH practitioners in Vijayawada city regarding the diagnosis and treatment of tuberculosis.
Methods: A cross-sectional study was conducted among AYSUH practitioners in Vijaywada for a period of one year. Data was collected by in depth interview method using pre-tested & structured questionnaire containing open & closed ended questions. This include their knowledge and attitude regarding Tuberculosis diagnosis and treatment and referral.
Results: Out of total 209 AYUSH practitioners 132(63.16%) belong to the age group less than 50years. 147(70.34%) said they has bachelor's degree including diploma qualification. Out of total 209 AYUSH practitioners 107(51.20%) correctly answered about the technique of staining for sputum smear. 176(84.22%) answered yes there is higher risk of development of TB in HIV patient. Out of total 209 AYUSH practitioners 155(74.16%) practitioners responded that they don't have knowledge regarding diagnostic & therapeutic guidelines of programme.
Conclusions: In this study it was observed that more than half of the participants were ayurvedic practitioners and no Siddha practitioners. Half of the practitioners answered sputum smear as the first choice of diagnostic method. Half of the practitioners answered sputum smear as the first choice of diagnostic method. More than 3/4th (79%) of the practitioners don't have knowledge regarding number of sputum samples used for follow up and had not attended Programme on Tb training programs.

Keywords: AYUSH Practitioners, Alternative systems of medicine, National programme on TB, KAP.

INTRODUCTION.

Mycobacterium tuberculosis is the causative agent of tuberculosis (TB), a particular infectious disease. The illness causes pulmonary TB and mainly affects the lungs. Additionally, it can infect the skin, lymph nodes, bones, joints, intestines, meninges, and other body parts. It is usually persistent; the illness presents with a range of clinical symptoms.[1] A chronic infectious bacterial disease that affects people all around the world is tuberculosis. It's diverse clinical presentation, host reaction, chemotherapeutic response, aetiology, and social ramifications make it a very peculiar disease. Ancient Buddhist and Chinese texts describe tuberculosis, an illness that has existed for a very long time.[2] Lesions from tuberculosis were discovered in Neolithic man's vertebrae in European mummies that may have been dated as early as 3700 BC.[3]

Effective TB control is hampered by the introduction of mycobacteria that are resistant to medications used to treat TB, which has grown to be a serious global public health issue.[4] A disease with both medical and social aspects, tuberculosis is closely linked to low socioeconomic status. It causes patients to endure a number of hardships, such as pain, a

lower quality of life, early death, financial expenses, and emotional trauma experienced by family members. Since TB kills and affects more adults in the productive age range than any other disease, society ultimately suffers from the negative social repercussions brought about by the disease's combined impacts on patients and their families.[5] An HIV-infected person newly infected with TB has a 10-30 times higher chances of developing the disease than among patients infected with TB only.[6]

India has the greatest TB burden in the world, accounting for two-thirds of cases in the South East Asia Region (SEAR) and approximately one-fifth (20%) of the global TB burden. Approximately 1.8 million people get tuberculosis each year, with 0.8 million of those cases being new, highly contagious, smear-positive cases. Approximately 0.32 million people die from tuberculosis each year. The annual chance of contracting tuberculosis is 1.5 percent, and the lifetime risk of getting tuberculosis disease is 10 percent after infection. TB bacillus is present in two out of every five Indians. Approximately 5,000 people get sick every day. Ten to fifteen people can be infected by patients with infectious pulmonary TB disease each year.[7] TB is the most prevalent opportunistic illness and the leading cause of death for people living with HIV (PLHIV), and it works in lethal tandem with HIV.[8] Since the introduction of first-line anti-tuberculosis medications for the treatment of tuberculosis, drug-resistant tuberculosis has been documented to exist in India.[9]

The most common cause of developing multidrug resistance is irregular consumption and frequent breaks from TB therapy. In India, it is believed that 2-3% of new cases and 14-17% of re-treatment cases have MDR-TB.[10] India has more than 500,000 medical professionals. Few of them, primarily well-known practitioners of western allopathic medicine, work with the National Program to reduce tuberculosis. When symptoms start to appear, a significant portion of the population first seeks advice from alternative systems of medicine, pharmacies and unlicensed doctors. Before receiving a diagnosis, the majority of TB patients see many providers.[11]

So, with its impressive infrastructure of 3277 hospitals, 24289 dispensaries, 7.85 lakh registered Ayurveda, Yoga & Naturopathy, Unani, Siddha & Homeopathy (AYUSH) practitioners and 62,649 beds in the government and government-aided sectors, the AYUSH sector can equally contribute to fight against TB by collaborating with existing the National Program of TB to reach desired national health outcomes.[12]

Given the background information above, it is thought necessary to evaluate the knowledge, attitudes, and practices of AYUSH practitioners in Vijayawada city regarding the diagnosis and treatment of tuberculosis. This will allow for the identification of factors that negatively impact diagnosis and treatment, which will then be addressed to strengthen the national program.

METHODOLOGY.

Out of many diverse sets of alternative systems of medicine, in this study only practitioners of AYUSH were included because rest of the systems were not practiced commonly. If at all practiced, they are not approachable to common man. As Siddha was not being practiced in Andhra Pradesh, they were not included in the study.

Data collection. Data was collected by in depth interview method using pre-tested & structured questionnaire containing open & closed ended questionnaire.

Study design. Cross-sectional study

Study Period: One year

Study setting & subjects. AYUSH practitioners under the limits of Municipal Corporation of Vijayawada.

Sample size. Universal sample size

Inclusion criteria. Only AYUSH practitioners

Exclusion criteria.

- If any practitioner is not available even after 3 visits, he/she is excluded from the study.
- Allopathic practitioners.
- Siddha practitioners
- Not willing to participate

The data collected from all the AYUSH practitioners include their sociodemographic details and their education and qualification details. Their knowledge regarding symptoms, high risk groups, diagnostic methods, treatment guidelines and referral system of existing national programme on Tuberculosis.

Ethical considerations. Ethical clearance was taken from Medical College, Institutional ethical committee, informed consent was also obtained from all the participants & confidentiality was maintained regarding the information given by them.

Data analysis. All the collected data was entered into MS Excel. Categorical data was presented as frequency, Percentages, proportions and analysed using chi-square test.

EPI-INFO version 7 was used to analyse the data.

RESULTS

Table No.1: Distribution of AYUSH practitioners in Vijayawada

Type of degree	Frequency	Percentage
Ayurveda	120	57.42
Yoga & Naturopathy	10	4.78
Unani	1	0.47
Sidda	0	0
Homeopathy	78	37.33
Total	209	100

Out of total 209 AYUSH practitioners, 132(63.16%) belong to the age group less than 50years. Out of 120 ayurvedic practitioners 73(60.84%) belong to less than 50years. Out of 89 non-ayurvedic practitioners 59(66.29%) belong to less than 50years.

Table 2: Distribution of sociodemographic, qualification training status of study among participants

Socio-demographic variable		Type of degree		Total No. (%)	P value
		Ayurveda No. (%)	Non-Ayurveda No. (%)		
Age	<50 years ≥ 50 years	73 (60.84) 47 (39.16)	59 (66.29) 30 (33.71)	132 (63.16) 77 (36.84)	>0.05
Sex	Female Male	37 (30.83) 83 (69.17)	23 (25.84) 66 (74.16)	60 (28.71) 149 (71.29)	>0.05
Qualification	Bachelor's degree including diploma Master's degree including Ph.D	79 (65.84) 41(34.16)	68 (76.41) 21 (23.59)	147 (70.34) 62 (29.66)	>0.05
Training programs attended	No Yes	92 (76.67) 28 (23.33)	74 (83.15) 15 (16.85)	166 (79.43) 43 (20.57)	>0.05

Out of total 209 AYUSH practitioners 132(63.16%) belong to the age group less than 50years. Out of 120 Ayurvedic practitioners, 73 (60.84%) belong to the age group of less than 50 years. Out of 89 non-ayurvedic practitioners 59(66.29%) belong to less than 50yearsOut of total 209 AYUSH practitioners doctors 149(71.29%) were males. Out of 120 ayurvedic practitioners 83(69.17%) were males. Out of 89 non-ayurvedic practitioners 66(74.16%) were males. Out of total 209 AYUSH practitioners, 147(70.34%) said they has bachelor's degree including diploma qualification. Out of 120 Ayurvedic practitioners, 79(65.84%) has bachelors degree including diploma. Out of 89 Non-ayurvedic practitioners, 68(76.41%) has bachelors degree including diploma. Out of total 209 AYUSH practitioners 166(79.43%) had not attended TB training programmes. Out of 120 Ayurvedic practitioners 92(76.67%) had not attended training programs. Out of 89 non-ayurvedic practitioners 74(83.15%) had not attended training programs.

Table 3: Distribution of knowledge regarding TB, MDR TB, staining, TB-HIVand pediatric TB status among study participants

Variable		Type of degree		Total No. (%)	P value
		Ayurveda No. (%)	Non-Ayurveda No. (%)		
TB Common problem	No Yes	40 (33.33) 80 (66.67)	27 (30.34) 62 (69.66)	67 (3206) 142 (67.94)	>0.05
Causative agent	Correct Incorrect	112 (93.33) 8 (6.67)	86 (96.63) 3 (3.37)	198 (94.74) 11 (5.26)	>0.05

Basic criteria for suspecting TB in adults	Correct Incorrect	47 (39.17) 73 (60.83)	32 (35.66) 57 (64.04)	79 (37.80) 130 (62.20)	>0.05
First choice of diagnostic method	Correct Incorrect	72 (60) 48 (40)	33 (37.08) 56 (62.92)	105 (50.24) 104 (49.76)	<0.05
Technique of staining	Correct Incorrect	60 (50) 60 (50)	47 (52.81) 42 (47.19)	107 (51.20) 102 (48.80)	>0.005
Suspect MDR TB	Correct Incorrect	29 (70.74) 91 (54.16)	12 (13.48) 77 (86.52)	41 (19.62) 168 (80.38)	>0.05
Confirm MDR TB	Correct Incorrect	38 (66.66) 82 (68.33)	19 (31.35) 70 (78.65)	57 152	>0.05
Risk of development of TB higher in HIV patient	No Yes	21 (17.5) 99 (82.5)	12 (13.48) 77 (86.52)	33 (15.78) 176 (84.62)	>0.05
Diagnosis of TB in HIV patient	Correct Incorrect	42 (35) 78 (65)	33 (37.08) 56 (62.92)	75 (35.89) 134 (64.11)	>0.05
DOTS applicable to pediatric pulmonary TB	No Yes	67 (55.83) 53 (44.17)	60 (67.41) 29 (32.59)	127 (60.76) 82 (38.24)	>0.05
Diagnosis of pediatric TB	Correct Incorrect	45 (37.50) 75 (62.50)	33 (37.08) 56 (62.92)	78 (37.32) 131 (62.68)	>0.05

Out of total 209 AYUSH practitioners 142(67.94%) had responded yes TB a common problem in their local practice area. Out of 120 Ayurvedic practitioners 80(66.67%) had responded yes TB a common problem in their local practice area. Out of 89 non-ayurvedic practitioners 62(69.66%) had responded yes TB is a common problem in doctor's local practice area. Out of total 209 AYUSH practitioners 198(94.74%) practitioners answered correctly the causative agent of TB. Out of 120 Ayurvedic practitioners, 112(93.33%) answered correctly. Out of 89 non-ayurvedic practitioners, 86(96.63%) answered correctly. Out of total 209 AYUSH practitioners, 130(62.20%) answered incorrectly the basic criteria for suspecting TB in adults. Out of 120 Ayurvedic practitioners, 73(60.83%) answered incorrectly. Out of 89 non-ayurvedic practitioners, 57(64.04%) answered incorrectly. Out of total 209 AYUSH practitioners 105(50.24%) correctly responded about the first-choice diagnostic method. Out of 120 Ayurvedic practitioners 72(60%) responded correctly. Out of 89 non-ayurvedic practitioners 33(37.08%) responded correctly.

Out of total 209 AYUSH practitioners 107(51.20%) correctly answered about the technique of staining for sputum smear. Out of 120 Ayurvedic practitioners 60(50%) answered correctly. Out of 89 non-ayurvedic practitioners 47(52.81%) answered correctly. Out of total 209 AYUSH practitioners 168(80.38%) suspected MDR-TB incorrectly. Out of 120 Ayurvedic practitioners 91(75.83%) suspected MDR-TB incorrectly. Out of 89 Non–Ayurvedic practitioners 77(86.52%) suspected MDR-TB incorrectly. Out of total 209 AYUSH practitioners 152(72.73%) confirmed MDR-TB incorrectly. Out of 120 Ayurvedic practitioners 82(68.33%) confirmed MDR-TB incorrectly. Out of 89 non-ayurvedic practitioners 70(78.65%) confirmed MDR-TB incorrectly

Out of total 209 AYUSH practitioners 176(84.22%) answered yes there is higher risk of development of TB in HIV patient. Out of 120 ayurvedic practitioners 99(82.5%) answered yes. Out of 89 non-ayurvedic practitioners 77(86.52%) answered yes. Out of total 209 AYUSH practitioners 134(64.11%) answered incorrectly the diagnosis of TB in HIV patients. Out of 120 Ayurvedic practitioners 78(65%) answered incorrectly. Out of 89 non-ayurvedic practitioners 56(62.92%) answered incorrectly. Out of total 209 AYUSH practitioners 127(60.76%) responded that DOTS not applicable to pediatric pulmonary TB. Out of 120 ayurvedic practitioners 67(55.83%) responded not applicable. Out of 89 non-ayurvedic practitioners 60(67.41%) responded not applicable. Out of total 209 AYUSH practitioners 131(62.68%) responded diagnosis of pediatric TB incorrectly. Out of 120 Ayurvedic practitioners 75(62.50%) responded incorrectly. Out of 89 non-ayurvedic practitioners 56 (62.92%) responded incorrectly.

Table 4: Distribution of knowledge, attitude regarding diagnostic procedures among study participants

	Type of degree	**Total**	

Variable		Ayurveda No. (%)	Non-Ayurveda No. (%)	No. (%)	P value
Knowledge reg. diagnostic & therapeutic guidelines of programme	No Yes	86 (71.67) 34 (28.33)	69 (77.53) 20 (22.47)	155 (74.16) 54 (25.84)	>0.05
Attitude in following diagnostic & therapeutic guidelines of programme	Negative Positive	27 (22.50) 93 (77.50)	20 (22.47) 69 (77.53)	47 (22.49) 162 (77.51)	>0.05
Practice of TB case finding	No Yes	47 (39.17) 73 (60.83)	35 (39.33) 54 (60.67)	82 (39.23) 127 (60.77)	>0.05
How many sputum smears collected	Correct Incorrect	30 (25) 90 (75)	22 (24.72) 67 (75.28)	52 (24.88) 157 (75.12)	>0.05
Which antibiotic prescribed if negative	Correct Incorrect	33 (27.5) 87 (72.50)	18 (20.22) 71 (79.79)	51 (24.40) 158 (75.60)	<0.05
Sent sputum sample for AFB staining to	Government Laboratory Private Laboratory None	48 (40) 55 (45.83) 17 (14.17)	30 (33.71) 48 (53.93) 11 (12.36)	78 (37.32) 48 (53.93) 11 (12.36)	>0.005
Diagnostic method preferred for follow up	Correct Incorrect	27 (22.50) 93 (77.50)	29 (32.58) 60 (67.42)	56 (26.79) 153 (73.21)	>0.05
How many sputum smears used for follow up	Correct Incorrect	27 (22.50) 93 (77.50)	17 (19.10) 72 (80.90)	44 (21.05) 165 (78.95)	>0.05

Out of total 209 AYUSH practitioners 155(74.16%) practitioners responded that they don't have knowledge regarding diagnostic & therapeutic guidelines of programme. Out of 120 Ayurvedic practitioners 86(71.67%) responded don't know and out of 89 non-ayurvedic practitioners 69(77.53%) responded don't know. Out of total 209 AYUSH practitioners 162(77.51%) had positive attitude towards diagnostic & therapeutic guidelines of programme on TB. Out of 120 Ayurvedic practitioners 93(77.50%) had positive attitude. Out of 89 non-ayurvedic practitioners 69(77.53%) had positive attitude. Out of total 209 AYUSH practitioners 127(60.77%) responded yes they practice TB case finding. Out of 120 Ayurvedic practitioners 73(60.83%) responded yes they practice TB case finding. Out of 89 non-ayurvedic practitioners 54(60.67%) responded yes they practice TB case finding.

Out of total 209 AYUSH practitioners 157(75.12%) practitioners responded incorrectly about the number of sputum smears to be collected for the sake of diagnosis. Out 120 Ayurvedic practitioners 90(75%) responded incorrectly. Out of 89 non-ayurvedic practitioners 67(75.28%) responded incorrectly. Out of total 209 AYUSH practitioners 158(75.60%) answered incorrectly the antibiotic prescribed if sputum smear is negative. Out 120 Ayurvedic practitioners 87(72.50%) answered incorrectly. Out of 89 non-ayurvedic practitioners 71(79.78%) answered incorrectly.

Out of total 209 AYUSH practitioners 103(49.28%) sent sputum sample to private laboratory. Out of 120 practitioners 55(45.83%) sent to private laboratory. Out of 89 non-ayurvedic practitioners 48(53.93%) sent to private laboratory. Out of total 209 AYUSH practitioners 153(73.21%) responded incorrectly the diagnostic method preferred for follow up. Out of 120 Ayurvedic practitioners 93(77.50%) responded incorrectly. Out of 89 non-ayurvedic practitioners 60(67.42%) responded incorrectly.

Out of total 209 AYUSH practitioners 165(78.95%) responded incorrectly regarding number of sputum samples used for follow up. Out o 120 Ayurvedic practitioners 93(77.50%) responded incorrectly. Out of 89 non-ayurvedic practitioners 72(80.90%) responded incorrectly.

DISCUSSION

In the present study, out of 209 AYUSH practitioners there are 120(57.42%) ayurvedic practitioners 10(4.78%) Yoga & Naturopathic practitioners, only 1(0.47%) Unani practitioner, no Siddha practitioners and 78(37.33%) Homeopathic practitioners. A Study conducted by Dhiraj Kumar Srivastava et al[13] on non-allopathic practitioners it was observed that

80(53.33%) ayurvedic practitioners, 57(38%) homeopathic practitioners and 13 (8.67%) others (Unani, Siddha) were involved in the study, that is majority of the participants were ayurvedic practitioners. The present study findings are similar to that of Dhiraj Kumar Srivastava et al [13]

In the present study out of 209 AYUSH practitioners 132(63.16%) belong to the age group less than 50years. A study conducted by C.L.Anandhi et al [14]on non-allopathic indigenous medical practitioners it was observed that around 40% were over 40 years of age. A study conducted by M. Uplekar et al on non-allopathic and allopathic practitioners it was observed that 80% of the patients were in the age group 15 – 45 years. The present study findings are similar to that of M.Uplekar et al [15] & differ with C.L.Anandhi et al. [14]

In the present study Out of 209 AYUSH practitioners 149(71.29%) are males. A study conducted by C.L.Anandhi et al [14] on non-allopathic indigenous medical practitioners it was observed that majority (96%) of them were males. A study conducted by Dhiraj Kumar Srivastava[13] on non-allopathic practitioners it was observed that 104(69.34%) were males and 46(30.66%) females that is majority of the participants were males. The present study findings are similar to that of C.L.Anandhi et al [14] and Dhiraj Kumar Srivastava et al. [13]

In the present study out of 209 AYUSH practitioners 147(70.34%) were graduates including diploma then followed by post graduates including Ph d 62(29.66%). A study conducted by Dhiraj Kumar Srivastava et al [13] on non-allopathic practitioners it was observed that majority of participants were graduates 94(62.67%) and then followed by post graduates 56(37.33%). The present study findings are similar to that of Dhiraj Kumar Srivastava et al. [13]

In the present study out of 209 AYUSH practitioners 166(79.43%) had not attended training programmes, 43(20.57%) had attended training programmes. A study conducted by Dhiraj Kumar Srivastava [13] on non-allopathic practitioners it was observed that majority of participants 89(59.34%) attended/received training programs and 61(40.66%) of them not attended/received training programs. The present study findings differ from that of Dhiraj Kumar Srivastava et al.[13]

In the present study out of 209 AYUSH practitioners 79(37.80%) practitioners considered a cough more than two weeks“ as a predominant symptom of TB. A KAP study of Tuberculosis in India, report prepared by study team (Gfk mode- Dr.R.B.Gupta, Dr. Piyusha Majumdar, Raghu Maharishi, Ridhima Bahl)[16,] conducted a cross sectional community based survey it showed that almost 94% of the health service providers (HSPs) considered „A cough of two weeks“ as a predominant symptom of TB. The present study findings differ from that of Dr.R.B.Gupta et al. [16]

In the present study out of 209 AYUSH practitioners it was observed that sputum examination correctly advised by 105(50.24%). A study conducted by Chirag Damore et al on both allopathy and AYUSH practitioners it was observed that sputum examination correctly advised by 47(81%). A Study conducted by Jyoti Khadse et al[17] on Ayurveda, homeopathy and allopathy practitioners it was observed that only 49(47.6%), PPs knew sputum smear examination as primary tool of diagnosis of tuberculosis. A study conducted by Dhiraj Kumar Srivastava[18] on non-allopathic practitioners it was observed that majority of the practitioners 80(53.34%) preferred sputum smear as the modality used for the diagnosis of TB patients. A KAP study of Tuberculosis in India, report prepared by study team (Gfk mode- Dr.R.B.Gupta, Dr. Piyusha Majumdar, Raghu Maharishi, Ridhima Bahl)[16,] showed that 79% had said that sputum smear examination is the preferred mode of diagnosis of tuberculosis. The present study findings differ from that of Chirag Damore et al, and Dr.R.B.Gupta et al [17] but are similar to that of Jyoti Khadse et a1 [16] & Dhiraj Kumar Srivastava et al [18]

In the present study out of 209 AYUSH practitioners 107(51.20%) correctly answered about the AFB staining for sputum smear and 102(48.80%) incorrectly. A Study conducted by Chirag Damore et al [19] on both allopathy and AYUSH practitioners it was observed that 40(69%) answered AFB (acid fast bacilli) sputum examination correctly and 18(31%) incorrectly. The present study findings are similar to that of Chirag Damore et al. [19]

In the present study out of 209 AYUSH practitioners 57(27.27%) knew that MDR-TB has to be diagnosed by Culture and Drug Susceptibility testing. A KAP study of Tuberculosis in India, report prepared by study team (Gfk mode- Dr.R.B.Gupta, Dr. Piyusha Majumdar, Raghu Maharishi, Ridhima Bahl) [16], showed that 54% knew that MDR-TB has to be diagnosed by Culture and Drug Susceptibility

testing. The present study findings differ from that of Dr.R.B.Gupta et al.[17]

In the present study out of 209 AYUSH practitioners 54(25.84%) were aware of national programme. A study conducted by Dr. Manasi Jayaprakash [20] on allopathic and non-allopathic practitioners it was observed that only 56% were aware of national programme. The present study findings differ from that of Dr .Manasi Jayaprakash [20]

In the present study out of 209 AYUSH practitioners 162(77.51%) expressed their willingness to get involved in Programme on TB for TB control. A study conducted by Jyoti Khadse et al[17] on Ayurveda, homeopathy and allopathy practitioners it was observed that only 12(11.6%) PPs expressed their willingness to get involved in Programme on TB for TB control. The present study findings differ from that of Jyoti Khadse et al. [17]

In the present study out of 209 AYUSH practitioners 56(26.79%) preferred sputum smear as the modality for follow up TB patients. A study conducted by Dhiraj Kumar Srivastava et al on non-allopathic practitioners it was observed that majority of practitioners 72(48%) preferred sputum smear as the modality for follow up TB patients. A study conducted by Dr. Manasi Jayaprakash on allopathic and non-allopathic practitioners it was observed that for follow up, sputum test was used by only 13.2%. The present findings study differs from that of Dhiraj Kumar Srivastava et al [18] and Dr. Manasi Jayaprakash. [20]

Limitations of this study: Those who are practising in remote locations and non-practitioners of AYUSH were not included in the study. This study was conducted only in Vijayawada. To generalize the study observations, further studies should be done in other settings for further detailed research.

Based on the findings, it can be recommended that all Ayurveda and non-ayurveda practitioners should be trained regarding TB, TB co-infection with HIV, drug resistance and the Programme on Tb. The programme should be included as a routine curriculum at the level of graduation. As the providers of alternate systems of medicine are showing positive attitude towards programme. Hence they should be utilized in the national program, to increase the case detection and referral rates.

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