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Knowledge, Belief, Quality Of Life And Expressed Practices Regarding Management Of Tuberculosis Among Tuberculosis Patients

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Abstract

Introduction: Improvement in patients' tuberculosis Knowledge, beliefs, Quality of life, and expressed practices are the vital components regarding the management of tuberculosis. Tuberculosis patients need to recognise the disease condition and raise awareness about infection prevention behaviours, and improve treatment adherence.

Aims: The aim of the study was to assess Knowledge, Belief, Quality of Life and Expressed Practices regarding Management of Tuberculosis among Tuberculosis patients.

Material and methods: A descriptive research design was used. A total of 125 patients were recruited (n=87) from the Civil Hospital, Ambala Cantt. Ambala. (n=16) and Civil Hospital Ambala City (n=22) by using the purposive sampling technique. Demographic Characteristics, Structured knowledge questionnaire, Structured Belief rating scale, Quality of life questionnaire (Airway Questionnaire 20), and Structured Expressed practices rating scale to assess Knowledge, Belief, Quality of Life and Expressed Practices tool were used to collect the data.

Results: The study showed that 60% of tuberculosis patients had below average levels of knowledge, 78% had high perceived negative beliefs, 74% had fair quality of life, and 58% had unhealthy practices regarding the management of tuberculosis. There was no significant correlation between knowledge, belief, quality of life and expressed practices of tuberculosis regarding management of tuberculosis among tuberculosis patients. There was a significant association of belief scores of tuberculosis patients with dietary habits and source of financial support at the 0.05 level of significance. There was a significant association of expressed practices scores of tuberculosis patients with place of residence, diagnosis of TB since and BMI at a 0.05 level of significance. **Conclusion:** Most of the tuberculosis patients had below average levels of knowledge, high perceived negative beliefs, fair quality of life and unhealthy practices regarding the management of tuberculosis.

Keywords: Tuberculosis patients, Management of Tuberculosis, Knowledge, Belief, Quality of Life and Expressed Practices

Introduction

TB is the 7th leading killer disease in all over the world. Tuberculosis (TB) is one of the top 10 causes of mortality. It is a communicable disease that can affect almost every organ of the body, but mostly affects the lungs in 75% of cases. India has the highest TB burden in the world, with an estimated incidence of 26.9 lakh cases in 2019 (WHO). About 7 million people reported a 12% increase compared to the

previous year, according to the India TB Report 2020 released by the Union Health Ministers. With nearly 74,000 notifications, Haryana reported a notification rate of 255, with approximately 17,500 notifications in 2019. Tuberculosis can be pulmonary as well as extrapulmonary based on the invasion of tubercular infection in the lungs or in other parts of the body. It can be a latent and active infection based on the patient's capacity to transmit infection. Tuberculosis is associated with risk factors such as age, HIV infection, asthma, diabetes mellitus, smoking, tobacco products, malnutrition, overcrowded housing, people in close contact with infectious diseases and alcohol abuse. The national strategic plan 2017- 2025, set out the government plans of how the elimination of tuberculosis can be achieved.7People have to be aware that TB can be cured with appropriate medication, and that treatment lasts at least 6 months, which can have a significantly positive impact on TB diagnosis and treatment adherence. Increasing the knowledge, improving the attitude and preventive practice is one way of protecting patients with TB. It emphasised the immediate need for education and implementation of infection control measures to safeguard people affected with TB. The importance of quality of life in TB is increasing over time. Therefore, quality of life is getting a precise role under the WHO-recommended vision of 'people-centred care', which is built into the End TB Strategy. TB patients with a lower quality of life at diagnosis were less likely to complete their TB treatment cycle and survive.

Lack of physical and financial resources might have negatively impacted patients' ability to effectuate infection control appropriately. Infection control implementation in hospitals by health

personnel to educate patients about TB and to disseminate information about cough, diet and hygiene maintenance. Expressed practices are one way to give education related to disease and to support health consumers in self-management activities, such as medication adherence, physical exercise and diet. Health Education plays a vital role in the treatment of tuberculosis. Different methods has used, such as leaflets, booklets & pamphlets to educate patients. Short video films and TB, AIDS, No Smoking / Tobacco, Asthma, etc. are being screened regularly to create awareness to the patients and their relatives. Controlling TB effectively is not the responsibility of healthcare workers alone; it is also the responsibility of each individual to prevent the spread of TB. Nurses can help to increase awareness of the people regarding right to access effective TB care by using different educational aids/ techniques. They should make people aware of DOTS therapy, and assess environmental conditions to determine whether the community's needs are being met.

Material And Methods

Formal administrative approval was obtained from the concerned authorities (Medical Superintendent and Nursing Superintendent) of MMIMS&R Hospital, Mullana, Ambala, Civil Surgeon (CMO) of Civil Hospital, Ambala Cantt. and Civil Surgeon (CMO) of Civil Hospital, Ambala City, Ambala-Chandigarh Highway(Project No: IEC-1550). Data was collected from 125 Tuberculosis patients by using a structured knowledge questionnaire, a Structured belief rating scale, a Quality of Life questionnaire (Airway questionnaire 20) and a structured expression practices scale regarding Management of Tuberculosis. 125 tuberculosis patients were included in the study. The purposive sampling technique was used. The raw data was entered in the master data sheet.

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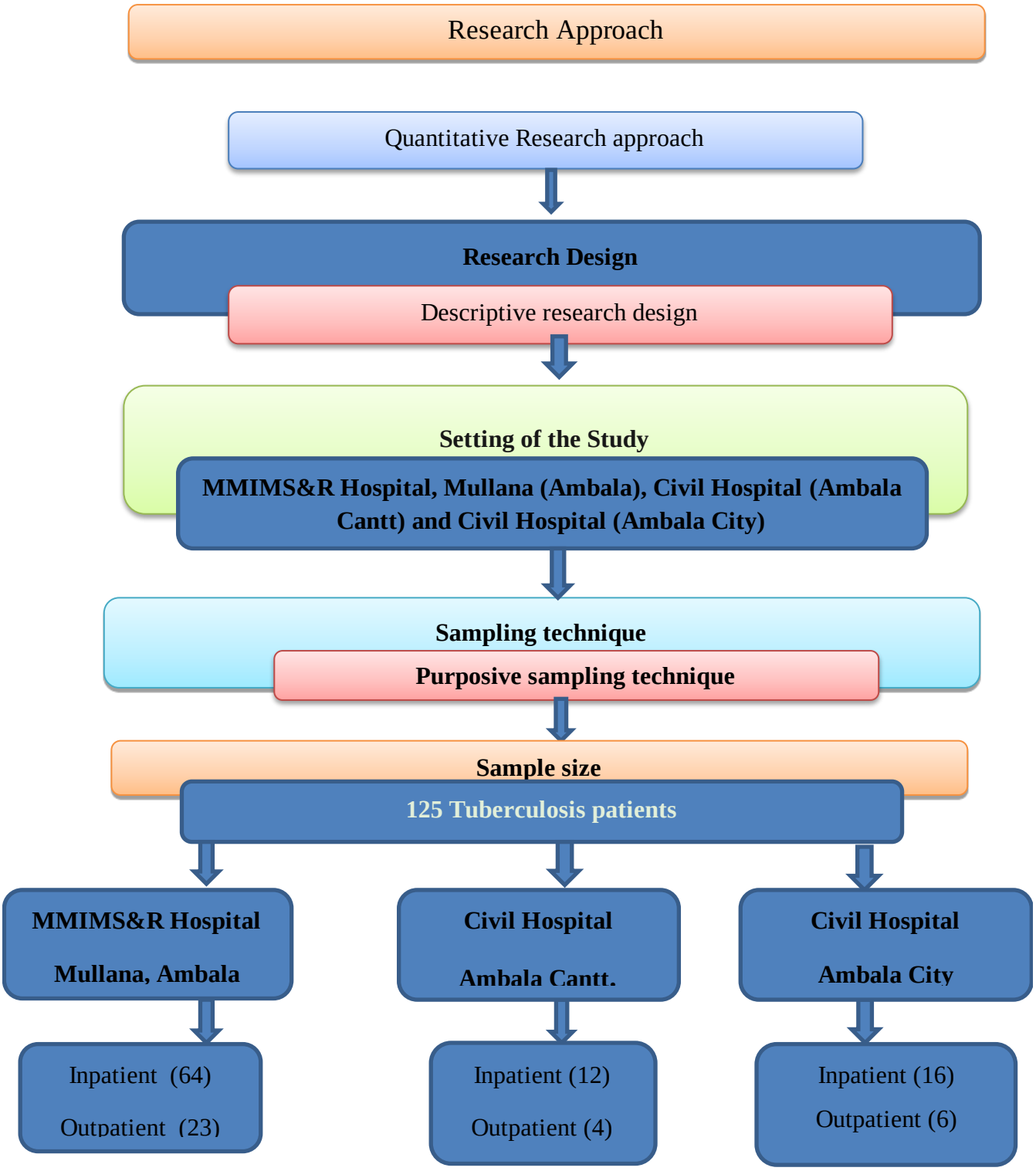
Figure 1: Flow chart of Research Methodology and Research Design.



Results

Data were entered into Microsoft Excel 2007 and analysed using SPSS (Armonk, NY: IBM Corp) version 20 for analysis. One third of the tuberculosis patients (33%) were in the age group of 51-65 years. Most of the tuberculosis patients (70%) were males. Most of the tuberculosis patients (66%) were married.

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The majority of tuberculosis patients (81%) belonged to the Hindu religion. More than half of tuberculosis patients (59%) were from a joint family. Most of the tuberculosis patients (67%) were living in rural areas. Half of tuberculosis patients (50%) had primary education. Less than half of tuberculosis patients (44%) were unemployed. More than half of tuberculosis patients (55%) had a family income <Rs 10,000. One third of tuberculosis patients (37%) were eggetarian. More than half of tuberculosis patients (52%) did not have any financial support. More than half of tuberculosis patients (58%) did not have a habit of substance abuse. The majority of tuberculosis patients (82%) did not have any Comorbid illness. Less than half of tuberculosis patients (43%) were diagnosed with tuberculosis on the same day. More than half of tuberculosis patients (56%) were underweight.

Most of the tuberculosis patients (60%) had below average levels of knowledge, and only (3%) had a very good level of knowledge regarding the management of tuberculosis. The majority of tuberculosis patients (78%) had high perceived negative beliefs regarding the management of tuberculosis. The majority of tuberculosis patients (74%) had a fair quality of life, and (26%) had poor quality of life regarding management of tuberculosis. More than half of tuberculosis patients (58%) were following unhealthy practices, and only (6%) were following healthy practices regarding management of tuberculosis.

There was no significant correlation between knowledge, belief, quality of life and expressed practices of tuberculosis regarding management of tuberculosis among tuberculosis patients. Pearson's correlation value (r`) 0.02 is lower than the tabulated value at the 0.05 level of significance. Hence, the null hypothesis H01was accepted, and the research hypothesis H1was rejected.

Kruskal-Wallis and Mann-Whitney U test values showing the association of knowledge scores of tuberculosis patients with selected demographic characteristics. The findings revealed that all the characteristics were found to be statistically not significant at the 0.05 level of significance. Hence, null hypothesis H02 was accepted, and research hypothesis H2 was rejected.

Kruskal-Wallis and Mann-Whitney U test values showing the association of belief scores of tuberculosis patients with selected demographic characteristics. The findings revealed that all the characteristics except dietary habits and source of financial support were found to be statistically not significant at the 0.05 level of significance. Hence, null hypothesis H03 was partially accepted, and research hypothesis H3 was partially rejected.

Post hoc test applied to find out the difference in belief scores of tuberculosis patients with reference to dietary habits. There was a significant difference between the dietary habits of non-vegetarian vs eggetarian (p=0.00*).

Kruskal-Wallis and Mann-Whitney U test values showing the association of quality-of-life score of tuberculosis patients with selected demographic characteristics. The findings revealed that all the characteristics were found to be statistically not significant at the 0.05 level of significance. Hence, null hypothesis H04 was accepted, and research hypothesis H4 was rejected.

ANOVA and independent t value showing the association of expressed practices scores of tuberculosis patients with selected demographic characteristics. The findings revealed that all the characteristics except place of residence, diagnosis of TB since and BMI were found to be statistically not significant at the 0.05 level of significance. Hence, the null hypothesis H05was partially accepted, and the research hypothesis H5 was partially rejected.

Post hoc test applied to find out the difference in expressed practices scores of tuberculosis patients with reference to the place of Residence. There was a significant difference between the Place of Residence of Rural and Slum (p=0.00*), Urban and Slum (p=0.00*), and to find out the difference in expressed practices scores of tuberculosis patients with reference to Diagnose TB

since. There was a significant difference between Diagnose TB since of Same day vs <a month(p=0.02*) and Same day vs > a month (p=0.00*). There was a significant difference between the diagnosis of TB in terms of underweight vs. normal weight (p=0.02*). (Table 4.15)

Figure-a bar graph showing item-wise percentage distribution in terms of cough hygiene of Expressed Practices regarding Management of tuberculosis among tuberculosis patients.

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Figure -showing a bar graph showing item-wise percentage distribution in terms of diet of Expressed Practices regarding Management of Tuberculosis among Tuberculosis patients.

Table 1 Frequency and Percentage distribution in terms of Level of Knowledge, Belief, Quality of Life and Expressed Practices regarding Management of Tuberculosis among Tuberculosis patients.

Variables	Levels	Range of scores	f (%)
Knowledge	Very good	19-24	9 (7)
	Good	15-18	4 (3)
	Average	12-14	37 (30)
	Below average	0-11	75 (60)
Belief	High perceived negative belief	41-80	98 (78)
	Low perceived negative belief	0-40	27 (22)
Quality of life	Poor	15-20	32 (26)
	Fair	8-14	93 (74)
	Good	0-7	0 (0)
Expressed practices	Healthy Practices	21-28	8 (6)
	Moderate Healthy Practices	15-20	45 (36)
	Unhealthy Practices	0-14	72 (58)

Minimum knowledge, belief, Maximum knowledge score = 24

quality of life, expressed, Maximum belief score = 80

Practices score = 0, Maximum quality of life score = 20

Maximum expressed practices score = 28

Table 2 Pearson Correlation showing the relationship of Knowledge, Belief, Quality of Life and Expressed Practice scores regarding the Management of Tuberculosis among Tuberculosis patients

Variables	Knowledge r (p value)	Belief r (p value)	Quality of life r (p value)	Expressed Practices r (p value)
Knowledge		0.02 (0.74) ^{NS}	-0.06 (0.49) ^{NS}	0.15 (0.08) ^{NS}

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Belief	0.02 (0.78) NS	0.05 (0.55) NS
Quality of life		-0.003 (0.97) NS
Expressed Practices		

(123) = 0.1 NS–Non significant (p>0.05)

* Significant (p≤0.05)

Figure 1: Bar graph showing item-wise percentage distribution in terms of diet of Expressed Practices regarding Management of Tuberculosis among Tuberculosis patients.

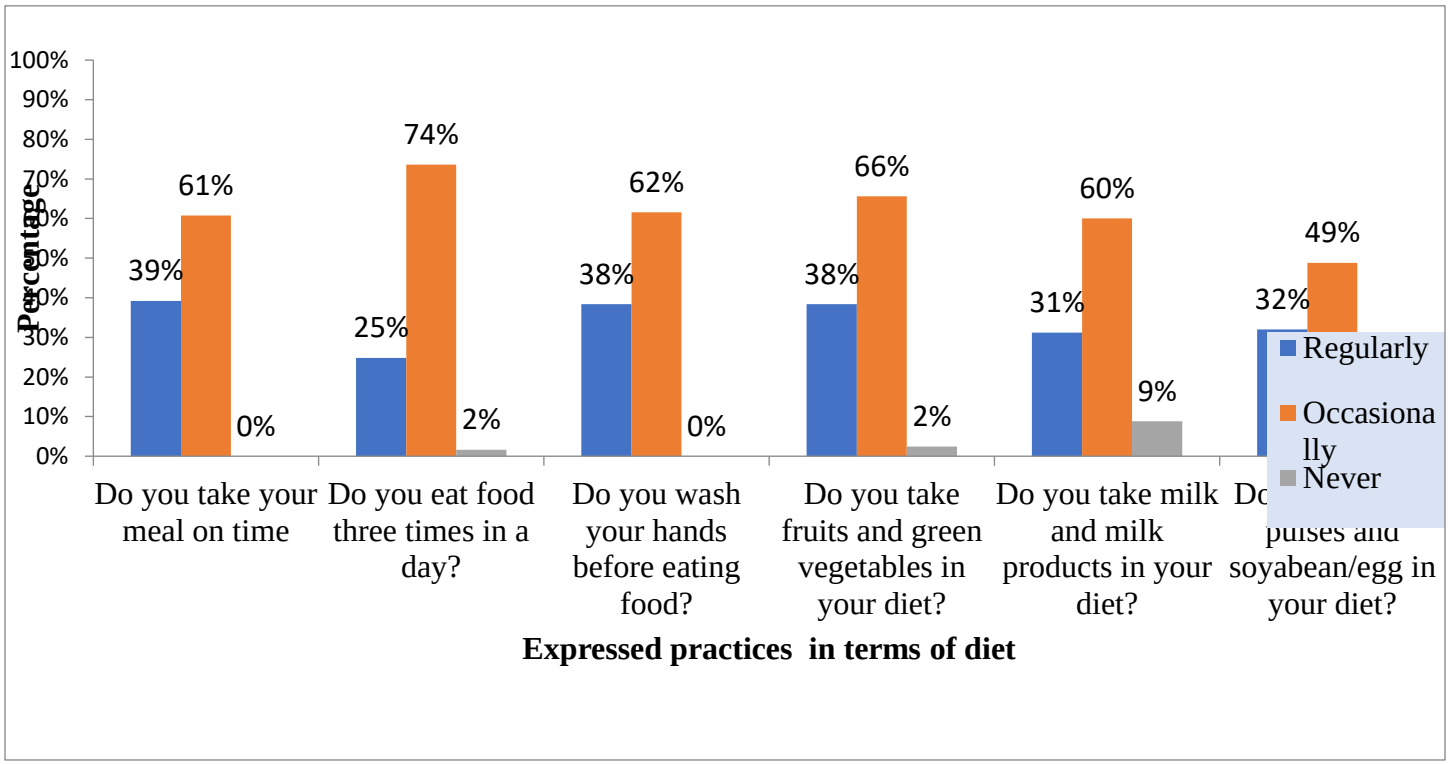

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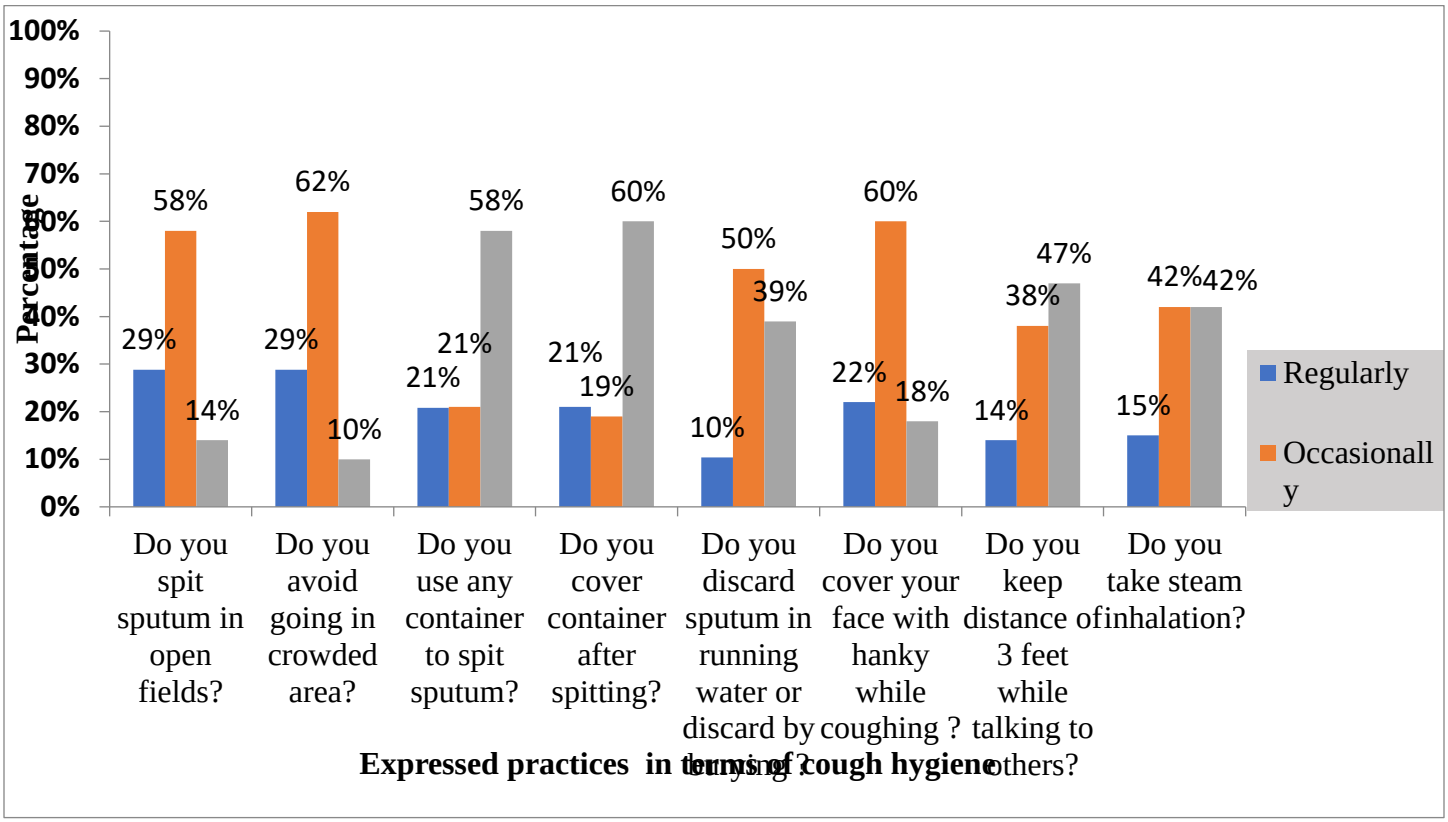
Figure 2: Bar graph showing item-wise percentage distribution in terms of cough hygiene of Expressed Practices regarding Management of Tuberculosis among Tuberculosis patients.



Conclusion

1. More than half of the Tuberculosis patients did not know the management of Tuberculosis among Tuberculosis patients.
2. The majority of the Tuberculosis patients had high perceived negative belief regarding the management of Tuberculosis among Tuberculosis patients.
3. More than half of the Tuberculosis patients had a fair quality of life regarding the management of Tuberculosis.
4. The majority of the Tuberculosis patients had unhealthy practices regarding the management of Tuberculosis.
5. There was no significant correlation between Knowledge, Belief, Quality of Life and Expressed Practices regarding Management of Tuberculosis in Tuberculosis patients.
6. There was no significant association of belief scores regarding management of tuberculosis patients, except for dietary habits and source of financial support with selected demographic characteristics.
7. There was no significant association of expressed practices score regarding management of tuberculosis patients, except for place of residence, diagnosis of TB since and BMI with selected demographic characteristics.

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ETHICS CONFLICT: All Financial And Non-Financial Conflicts, As I Feel.

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