

**Report of a Research Study on**

**Gender Perspectives in Knowledge, Attitudes and**

**Practices Concerning Tuberculosis in Pakistan's**

**Sindh Province**

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## Executive Summary

Tuberculosis, commonly referred to as TB, is one of the most important infectious causes of mortality in the developing world. The estimated incidence of Tuberculosis is 8 million new cases occurring annually, while 2 million deaths occur yearly on the global level. Pakistan has the eighth highest TB burden globally and accounts for 44% of the TB burden in the Eastern Mediterranean Region (EMRO). It is currently estimated that there are around 1.5 million TB patients in Pakistan, while every year 250,000 new persons develop TB. Being a leading infectious killer, Tuberculosis kills more women than all causes of maternal mortality combined. In 1998, around 750,000 women died due to Tuberculosis. As Tuberculosis affects women mainly in their reproductive years, it has a major impact on their families particularly their children. Health-seeking behaviour generally differs between men and women as due to inadequate information, women are usually ill-informed about their health and fail to recognize the early symptoms of the disease. However, the human element in TB control has often been overlooked. Local surveys on knowledge, attitudes and practices regarding Tuberculosis will greatly benefit in the planning, health education and implementation of the TB Control Programme. The DOTS programme was launched in Pakistan in an organized fashion in the year 2000. For successful TB Control and efficacy of any DOTS (Directly Observed Treatment Short Course)<sup>1</sup> programme it is important to target the female sex to elicit their beliefs and knowledge concerning Tuberculosis. The present cross-sectional descriptive study was accordingly conducted in the urban and rural areas of the Sindh Province and the data was collected using semi-structured questionnaires as well as through Focus Group Discussions. The study had the following objectives:

- ✚ To study the gender differences in knowledge (about the cause, spread, treatment and progression) and attitudes towards Tuberculosis in urban and rural communities in Sindh.
- ✚ To compare the male and female health seeking behavior in the community, and
- ✚ To compare the differences in urban and rural perspective regarding knowledge and attitude towards Tuberculosis.

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<sup>1</sup> This is the WHO-IUATLD recommended strategy for TB Control

The overall knowledge of the signs and symptoms of Tuberculosis was generally deficient but particularly so in rural females. This is evident from the simple fact that only 5.6% of rural womenfolk mentioned blood in sputum as a symptom of Tuberculosis and less than 5% of them mentioned prolonged low-grade fever as a symptom. Only 9.8% rural females could quote germs as causing Tuberculosis as opposed to 30% urban females. Furthermore, just 6.3% rural females and 23.1% rural males were aware that sputum testing was the most specific diagnostic investigation for TB. The contagious nature of the disease was mentioned by 37 – 38% males. Sharing of utensils was considered as a major means of its spread. A married woman with Tuberculosis was generally expected to sleep away from her husband, children and to keep her clothing and utensils separate. Both rural and urban men (14–20%) stated that completing the treatment of a TB patient helped in preventing other members from contracting the disease, while only 7 – 9% females were aware of this basic fact. TB was generally considered a dangerous disease and a “death sentence” by most females. Men considered it dangerous but curable. The dangerous nature of Tuberculosis was linked to the stigma associated with the disease and social isolation by the community. Affliction of young girls by TB was considered to have a negative impact on her marriage prospects. In case of married women, especially in the rural areas, women expected to be treated badly by their in laws and in most cases to be banished from their homes. Largely owing to these reasons, more female respondents than men feared social isolation and rejection by friends and colleagues.

A marked disparity was noticed in the health seeking behaviors, in urban and rural areas, whereby urban respondents frequented private clinics while rural respondents, especially males visited government public hospitals. This health-seeking behaviour explains the enhanced level of knowledge amongst rural males. In the urban area males and females frequent private practitioners, who for the most part in the slum areas are unqualified health care providers and even if qualified have not had access to academic centers since a long time. For this reason, they are also not familiar with programmes or strategies such as DOTS, which are not primarily implemented through the private health sector. In the rural areas, most public health programmes are implemented through government hospitals and health centers where the doctors are usually well-versed in public health programmes and provide health education to all patients. Since rural males visit these health facilities

frequently, their knowledge is surprisingly far superior to their urban counterparts. Conversely, rural females have an overall low exposure and are not at liberty to freely visit the health facilities unescorted.

In relation to the DOTS strategy it was found that 30% urban females and 70% rural females were averse to the idea of regularly visiting the health facility for supervised drug administration. Furthermore, only 30% urban respondents and nearly 80% rural respondents agreed to allow an outsider to come to their house to administer medicines provided that the health worker was a female.

The present study clearly brought forth to the surface the generally low level of knowledge regarding Tuberculosis. An intensified health education programme is apparently warranted in order to raise the awareness of the masses and the huge private health sector particularly in the mega-cities and other urban areas. There is also a dire need to destigmatize the disease. Social isolation and rejection by family, friends and colleagues, as well as misconceptions concerning its contagious nature often lead people to the idea that TB is a disease to be feared. A concerted effort is required by the media, doctors and health workers to remove these misconceptions, so that the stigma associated with TB can be removed and early case detection and treatment ensured. It is also imperative for policy makers and planners to bear in mind the constraints faced by most females in either regular visits to the health facilities or supervised drug administration elsewhere in order to lessen the default rate, and all the lady health workers (LHWs) or female community workers should be employed in the process more judiciously.

## Introduction

Tuberculosis is one of the leading infectious disease killer in the developing world. The estimated incidence of Tuberculosis is 8 million new cases occurring annually while 2 million deaths occur yearly globally (1,2). Twenty-three high burden countries of the world, which account for 80% of all these cases are hence forth referred to as TB 80. The total number of Tuberculosis cases are predicted to increase in all regions up to 2005, while a 3% increase on coverage is expected. If the present trend continues it is expected that the number of new cases would increase to 10.2 million cases by the year 2005.

In Pakistan, Tuberculosis remains a major public hazard and is chiefly considered a disease of poverty. Pakistan has the 8<sup>th</sup> highest TB burden globally and accounts for 44% of the TB burden in the Eastern Mediterranean Region of the World Health Organization (WHO) that comprises of 23 countries. The incidence of TB in Pakistan is 177/100,000 but the prevalence is much greater and it is currently estimated that there are around 1.5 million patients in Pakistan, while every year 250,000 new persons develop TB. Barely 20% of the new cases are either detected or treated (3).

In the Sindh province of Pakistan, an estimated 88,000 persons contract this disease every year including 44,000 smear positive cases. The DOTS programme was initiated in Pakistan in the year 2000 aiming at 100% DOTS coverage in the country by the year 2005. In Sindh, the DOTS programme aims to detect at least 70% cases of Tuberculosis and successfully treating at least 85% of them by 2003, two years ahead of the national target. This will enable the programme to reduce the prevalence and mortality due to the disease by 50%, by the year 2010(3,4).

Being a leading infectious killer, Tuberculosis kills more women than all causes of maternal mortality combined (5). In 1998, about three quarters of a million women died due to Tuberculosis and over 3 million contracted the disease, accounting for about 17 million Disability Adjusted Life Years (DALYS) (6). It is estimated that 646 million women and girls worldwide are already infected with the disease (6). A number of studies have shown that in high prevalence countries women in their reproductive years (15 – 40 years) have high rates of progression to disease than men of the same age. This may be due to the

physiological changes associated with reproduction (7,8,9). As Tuberculosis affects women mainly in their economically productive and reproductively active years, the disease has a marked negative impact on their children and families. Indeed Tuberculosis in women retards the economic growth and development of society and affects the well-being of children (10). Women also face major obstacles in gaining access to diagnostic facilities, investigation of the disease and completing treatment. Additionally, they have to cope with the added burden of house work, child care and possibly employment, which allows them little time to access health care including Tuberculosis care for themselves (10,12).

Health-seeking behavior generally differs between men and women. Because of inadequate information women are ill-informed about their health and fail to recognize the early symptoms of disease. Women are also less likely to consult modern health services as compared to men (13,14). Sex, gender, culture and personal experiences are generally said to influence health-seeking behavior. Several authors agree that the human element in TB control has often been overlooked (15,16,17). These authors suggest that there would be significantly better TB control, if more attention is given to the health culture of the population. Local surveys on knowledge and attitude towards TB are therefore likely to greatly benefit the planning and implementations of the TB Control Programme. Previous studies have shown that several health interventions have failed because they were designed without ascertaining the knowledge of the health behavior of the target population (18).

A study conducted in Sialkot in Pakistan's most populous province of the Punjab has highlighted the importance of providing culturally sensitive health education and counseling to TB patients and relatives (19). It is, therefore, extremely necessary to conduct such studies which highlight the culturally sensitive health education, so that a meaningful change for the better can be brought about in the implementation of TB Control Programmes.

The DOTS Programme in Sindh was launched in August 2000. Currently, the DOTS coverage in Pakistan is 40% while in Sindh it is 70% (20). It has been consistently noticed that the number of female TB patients detected and receiving treatment under DOTS was less than males. For instance during the third quarter of 2002 in Sindh, 806 new smear positive males were detected as compared to only 604 females. Similarly while during the same period 959 smear negative males were detected the number of such females was only 79 (21). It is evident therefore that the number of female patients actively reporting to the

health centers is much less than males, reflecting the fact that females have less access to health centers. For successful TB Control it is important to target the female sex and to elicit the beliefs and knowledge of women regarding Tuberculosis as well as their health seeking behaviour. Education and counseling is an integral part of any TB Control Programme. The education of both the staff and patients should begin with an assessment of the existing knowledge of TB so that their beliefs can be corrected. In Sindh the rural:urban population ratio stood at 51:49 in the 1998 census.

Rural areas in Pakistan have a poor infrastructure and basic amenities are lacking, with inadequate infrastructure in the health, education and sanitation sectors. The women in the rural areas have less access to formal education and are consequently less aware of health related issues. Traditional erroneous beliefs, myths, taboos and incorrect practices are also more common in rural areas. To help in the baseline assessment of the gender differences in the knowledge regarding Tuberculosis, a study was conducted in the urban and rural areas of Sindh Province in Pakistan with the following objectives:

- To study the gender differences in knowledge (about the cause, spread, treatment and progression) and attitudes towards Tuberculosis in urban and rural communities in Sindh.
- To compare the male and female health seeking behavior in the community
- To compare the differences in urban and rural perspective regarding knowledge and attitude towards Tuberculosis.



## **Methodology**

This was a cross-sectional descriptive study. The study was conducted in one urban site in the mega city of Karachi known as Baldia Town and one union council in taluka or sub-district Tando Jam in Hyderabad district, which represented the rural site. Two hundred households were interviewed (100 urban and 100 rural), chosen from the data based voters list, using a table of random numbers. All family members at and above the age of 20 were included in the study. Data was collected using semi-structured questionnaires as well as in Focus Group Discussions. These questionnaires were pre-tested and modified according to the feedback received.

The semi-structured questionnaires comprised of closed-ended and open-ended questions. Questionnaires were translated into the national language Urdu and the local language Sindhi. The household questionnaire included questions on age, sex, literacy and socio-economic status of the respondents. The individual questionnaires contained questions regarding the knowledge of the individuals concerning Tuberculosis. Perceived causes of Tuberculosis and factors responsible for its spread were also explored. Questions were asked relating to the signs and symptoms of Tuberculosis, and the investigations required in such cases. The health-seeking behavior for both males and females was also ascertained. The responses were graded into three types of answers. Either the respondents did not know the answer and answered in negative, or they answered immediately without any prompting or probing. The other option was gentle probing by the interviewers resulting in an answer. The interviewers were trained in probing techniques.

Open ended questions were asked concerning the individuals attitude towards Tuberculosis and the socio-cultural stigmas associated with the disease. The community's attitude towards females who develop TB was also elicited. The questionnaire was administered by interviewers who under went a two day training on questionnaire administration techniques. In case of males, a male interviewer was used and in case of females, a female interviewer administered the questionnaire. The entire questionnaire was usually completed in around 40 minutes. In case of open-ended questions the raw data was categorized into open codes. These open codes were applied by two independent researches and the results were discussed with the whole team. Consent was obtained from the respondents before administrating the questionnaire.

# RESULTS

## Demographic Pattern

As mentioned earlier, the data was collected from 200 hundred households, 100 households in the urban area and 100 households in the rural area. The questionnaire was imparted to every adult male and female between twenty to forty-five years of age staying permanently in the households. Any member who had been staying for less than six months in the households was not interviewed. In the urban area 455 individuals were interviewed, while in the rural area 299 individuals were interviewed giving a total of 754 forms. In the urban area 229 males and 226 females were interviewed, while in the rural area 156 males and 143 females were interviewed. The mean number of persons per households in urban area was 9.6, while in the rural area it was 8.4. Of these 62% males were married while 74.3% females were married. About 36.2% males were unmarried and 22.1% females were unmarried. The rest were either divorced or widowed. As can be seen in table 1, the majority of the households both in urban and rural areas had 7 to 14 persons per households.

*Table 1: Percentage distribution of Persons in urban and rural areas*

<b>No of Persons per households</b>	<b>Urban (%)</b>	<b>Rural (%)</b>
2-6	16.2	23.1
7-10	25.2	35.1
11-14	26.2	28.8
11 – 18	16.9	10.0
19 – 22	15.	3.0
<b>n</b>	<b>455</b>	<b>299</b>
<b>Total</b>	<b>100</b>	<b>100</b>

Most of the houses in the rural area were of ‘katcha’ roof that is not of a permanent nature, while in the urban areas houses were usually possessed with cemented roofs or shelters. Table 2 depicts that in the rural areas 58.19 % houses had ‘katcha’ roofs while iron shelters were chiefly seen in urban areas (10.1%).

Table 2: Material of Roof of Households

Material	Urban	Rural
	(%)	(%)
<b>Katcha Roof</b>	23.0	55.18
<b>Cement katcha roof</b>	50.9	39.79
<b>Iron roof</b>	15.4	0.66
<b>Iron shelter</b>	10.1	0.66
<b>Others</b>	0.7	3.37
<b>n</b>	<b>455</b>	<b>299</b>
<b>Total</b>	<b>100</b>	<b>100</b>

Chi square=130.46 P<0.0001

Table 3 shows the number of rooms in the urban and rural households. As seen in the rural areas, the majority of the households had either one (21.52%) or two rooms (44.1.%) On the contrary in the urban areas houses had three (24.65%) or four (23.7%) or even more than four rooms (22.6%) Hence there was a difference in the living pattern of urban and rural areas.

Table 3: Percentage distribution of Rooms in urban and rural areas

No of Rooms	Urban	Rural
	(%)	(%)
One	9.9	21.52
Two	19.3	44.1
Three	24.6	13.54
Four	23.7	13.19
More then four	22.6	7.6
n	<b>455</b>	<b>299</b>
Total	<b>100</b>	<b>100</b>

Chi square=130.25 p<.0001

Most of the households had income between Rests. 2000-5000, both in the urban and rural areas. In the urban area, 23.3 % houses had income between Rests. 5000-8000. Very few houses had income more then Rs. 10,000.

*Table 4; Income Per Households in urban and rural area*

<b>INCOME</b>	<b>Urban</b>	<b>Rural</b>
	(%)	(%)
<b>&lt; 2000</b>	19.5	18
<b>2001-4000</b>	27.2	27.7
<b>4001-5000</b>	14.9	15.7
<b>5001-8000</b>	23.7	11
<b>8001-10000</b>	6.1	14.6
<b>Above 10000</b>	8.6	13
<b>n</b>	<b>455</b>	<b>299</b>
<b>Total</b>	<b>100</b>	<b>100</b>

**Chi Square = 31.39                      p value < 0.0001**

We also tried to asses the economic status of the study households by eliciting the owner ship of various key items. Radio and TV ownership was virtually the same in the urban and rural areas, while in the urban areas more households owned refrigerators. As anticipated, goats and buffalos were owned by nearly 30% of the rural households, while very few urban homes had household animals. In the rural areas, motor cycles are more popular as means of transport (24.35). Car and truck ownership was negligible both in urban and rural areas in the households studied.

Table 5: Percentage Distribution of Ownership of key items.

Owner Ship	Urban	Rural	p value
	(%)	(%)	
<b>Radio</b>	52.0	41.0	0.004
<b>T.V</b>	71.3	64.6	0.11
<b>Fridge</b>	51.3	34.4	< 0.0001
<b>Goat</b>	7.2	29.2	< 0.00001
<b>Buffalo</b>	0.9	28.1	< 0.00001
<b>Motorcycle</b>	16.9	24.3	< 0.01
<b>Car/Truck</b>	4.4	8.7	0.02
<b>N</b>	<b>455</b>	<b>299</b>	
<b>Total</b>	<b>100</b>	<b>100</b>	

In Pakistan cities generally have a mixed ethnic background as compared to rural areas which typically belongs to one ethnic group. The ethnic background generally influences the perceptions regarding disease pattern depending upon the traditional patterns. In our study area the urban population comprised of a mix of various local ethnic groups e.g. Mohajirs, Pathans, Sindhis etc, while in the rural area the predominant ethnic group was Sindhi (98.75), which comprised of only 6.4% of the urban population.

Table 6: Percentage distribution of Ethnic Group in urban and rural Areas

Ethnic Group	Urban	Rural
	(%)	(%)
<b>Mohajir</b>	36.4	0.31
<b>Sindhi</b>	6.4	98.7
<b>Bolochi</b>	8.6	0.7
<b>Punjabi</b>	4.2	0.0
<b>Pushto</b>	23.9	0.31
<b>Others</b>	20.6	0.0
<b>n</b>	<b>455</b>	<b>299</b>
<b>Total</b>	<b>100</b>	<b>100</b>

Chi square=628.38 p<0.0001

Female literacy was very low in the rural areas where 78.3 % women did not know how to read or write. 14.2 % females in the urban areas were matriculate, while only 5.8% females in the rural areas had studied up to matriculation.

*Table7: Female Literacy Rate*

<b>Literacy Rate</b>	<b>Urban</b>	<b>Rural</b>
	(%)	(%)
<b>Non educated</b>	51.3	78
<b>Primary</b>	9.3	6.3
<b>Secondary</b>	7.1	0.7
<b>Middle school</b>	10.6	0.7
<b>Metric</b>	14.2	5.8
<b>Inter</b>	5.3	5.1
<b>Graduate</b>	0.9	2
<b>Master</b>	0	0.7
<b>Professional ability</b>	0	0.7
<b>Adult literacy</b>	0.9	0
<b>Other</b>	0.4	0
<b>n</b>	<b>226</b>	<b>143</b>
<b>Total</b>	<b>100</b>	<b>100</b>

**Chi Square = 38.67                      p value < 0.0001**

A similar pattern was witnessed with regard to male literacy, whereby nearly half the men in the rural areas were uneducated while in the urban areas 1/3 were uneducated. More men in the urban areas had studied up to middle or metric. Higher education was definitely a low priority for men.

Table 8: Male Literacy Rate

Literacy Status	Urban	Rural
	(%)	(%)
<b>Non educated</b>	32.3	55.1
<b>Primary</b>	14	16
<b>Secondary</b>	5.7	1.3
<b>Middle school</b>	17	1.9
<b>Metric</b>	17.5	8.3
<b>Inter</b>	8.3	9
<b>Graduate</b>	3.9	5.8
<b>Master</b>	0.4	1.9
<b>Professional ability</b>	0.5	0.7
<b>Adult literacy</b>	0.4	0
<b>n</b>	<b>229</b>	<b>156</b>
<b>Total</b>	<b>100</b>	<b>100</b>

**Chi Square = 42.33                      p value < 0.00001**

Most men in the urban areas worked as labourers, while in the rural areas 16% worked on the farms as agricultural workers. There were more store keepers in the rural areas (24.4%), as compared to (10.9%) in the urban area. Driving was another important occupation. In case of females nearly 80 to 85 percent were housewives.



**Table 9. Occupation of Male**

<b>Occupation</b>	<b>Urban(%)</b>	<b>Rural(%)</b>
Unemployed	10.4	2.6
Officer	0.9	1.3
Professional	0.9	1.9
Teacher	2.2	5.8
Store keeper	10.9	24.4
Driver	9.2	12.2
Daily Wages	4.8	7.1
Clerk	0.4	0.0
Security workers	0.9	1.9
Labor	30.1	16.0
Student	3.5	4.5
Home industry	0.4	1.3
Others	25.4	21
<b>n</b>	<b>229</b>	<b>156</b>

**Chi square=40.44**

**p value<0.0001**

**Table 10. Occupation of Female**

<b>Occupation</b>	<b>Urban (%)</b>	<b>Rural (%)</b>
Unemployed	0.4	0.7
Officer	0.9	0
Professional	0.4	0
Teacher	2.7	2.1
Store keeper	0	0.7
Daily Wages	1.3	2.8
Labour	3.1	5.6
House wife	85.4	80.4
Student	2.2	4.9
Home industry	1.3	0
Others	2.3	2.8
<b>n</b>	<b>226</b>	<b>143</b>

**Chi square=13.60**

**p value < 0.326**

## Knowledge about Tuberculosis

Male and female perspectives regarding Tuberculosis were obtained both in urban and rural areas. Interesting observations were made regarding the signs of TB as perceived by males and females in rural and urban areas. In the urban area cough was the most common symptom cited by males (67.2%) and females (76.5%). Blood in sputum was again cited by both males and females (17 to 18%). Prolonged fever was most commonly reported by females (29.6%). Others symptoms including weight loss, anorexia and night sweats were not reported by either males or females. In the rural area, a definite difference was seen between the male and female perceptions. 57.7% males cited cough as a predominant symptom as compared to 21% females. Again 25.6% males gave blood in sputum as an important symptom as compared to only 5.6% females. Prolonged fever was also cited by 19.2% males. Neither males nor females reported night sweats, anorexia or weight loss as symptoms before probing.

*Table 11: Percentage distribution of Perceptions regarding symptoms of TB in rural area males and females*

<b>Before Probing</b>	<b>Male(%)</b>	<b>Female(%)</b>	<b>p value</b>
Cough	57.7%	21%	<0.001
Persistent Cough	1.3%	0%	<0.0004
Prolonged fever	19.2%	4.9%	<0.0001
Night sweats	0%	0%	-
Blood in sputum	25.6%	5.6%	<0.001
Anorexia	3.8%	1.4%	>0.05
Weight loss	4.5%	1.4%	>0.05
Others	1.3%	0%	

Table 12: Percentage distribution of Perceptions regarding symptoms of TB in males and females in urban area

Before Probing	Male(%)	Female(%)	p value
Cough	67.2%	76.5%	>0.05
Persistent Cough	7%	0.4%	<0.05
Prolonged fever	7.4%	29.6%	<0.01
Night sweats	0%	0%	-
Blood in sputum	17.9%	18.6%	>0.05
Anorexia	0.4%	1.3%	>0.05
Weight loss	7.9%	8.8%	>0.05
Others	1.3%	8%	>0.05

Very few people were aware of the causative agent of Tuberculosis. In the rural area only 1.3% males gave bacteria as a causative agent for Tuberculosis and none of the females knew bacteria as a causative agent for Tuberculosis. In the urban area 30 to 35% males and females cited germs as causing TB before probing them further. After probing 47% males and 39% females gave germs as a causative factor for TB. Over all neither males nor females could give germs as an important cause of TB. However in rural areas knowledge of males was better as 18.6% males were aware of germs causing TB as compared to 9.8% females, before they were probed. A negligible proportion of the respondents referred to magic or evil as causing TB, even in the rural areas.

Table 13: Germs as Causative Factor for TB in urban areas

n=455

	Don't know	Before Probing	After Probing
Male	47(20.5%)	73(31.9%)	109(47.6%)
Female	55(24.3%)	82(36.3%)	89(39.4%)
Chi square=3.15	p value=0.05		

Table 14. Germs as Causative Factor for TB in rural Areas

n=299

	Don't know	Before Probing	After Probing
Male	47(30.1%)	29(18.6%)	80(51.3%)
Female	25(17.5%)	14(9.8%)	104(72.7%)
Chi square=14.55	p value<0.0001		

TB is generally considered a disease of poverty. This perception was shared by both the genders in the urban and rural areas. In the urban area 22% males and 32% females said that poverty predisposed to TB, before probing them. On probing them nearly 50% males and 42% females felt that poverty predisposed to Tuberculosis. In the rural area more males (34.6%) as compared to females (25.2%) cited poverty as predisposing to TB. Significant *p* value of less than 0.0001 was seen in the male and female perceptions.

*Table 1: Poverty as causative factor for TB in urban areas*

**n=455**

<b>After Probing</b>	<b>Don't know</b>	<b>Before</b>	<b>Probing</b>
<b>Male</b>	<b>63(27.5%)</b>	51(22.3%)	115(50.2%)
<b>Female</b>	58(25.7%)	73(32.3%)	95(42%)

**Chi square 6.00      p value > 0.05**

*Table 16: Poverty as causative factor for TB in rural areas*

**n=299**

<b>After Probing</b>	<b>Don't know</b>	<b>Before</b>	<b>Probing</b>
<b>Male</b>	24(15.4%)	54(34.6%)	78(50%)
<b>Female</b>	4(2.8%)	36(25.2%)	103(72%)

**Chi square 20.81      p value < 0.001**

The other predisposing factor cited was TB in the family by 15.4% males and 9.8% females in the rural area and 3.9% males and 11.5% females in the urban area. Very few responded to evil, over crowding or debility as a predisposing factor. It was interesting to note that most of the respondents gave X-ray as one of the important diagnostic tests for TB. In the urban areas nearly half of the females (51.3%) said X-ray was an important diagnostic test as compared to only 18.3% males, however the opposite was true in the rural area where by 69.2% males and only 30% females gave X-ray as an important diagnostic test.

Although the sputum testing for AFB is the investigation of choice for TB, many respondents were generally unaware about it. The knowledge about sputum test in the urban areas was more in males. 35.4% females were not aware of the sputum test as compare to 11.8% males. Even after probing 63.8% males referred to sputum examination as compared to only 35% females.

Table 17: Sputum as a diagnostic test for TB in urban areas

n=455

	<b>Don't know</b>	<b>Before Probing</b>	<b>After Probing</b>
<b>Male</b>	27(11.8%)	56(24.5%)	146(63.8%)
<b>Female</b>	80(35.4%)	65(28.8%)	81(35.8%)

Chi square=45.52      p value<0.001

Table 18: Sputum as a diagnostic test for TB in rural areas

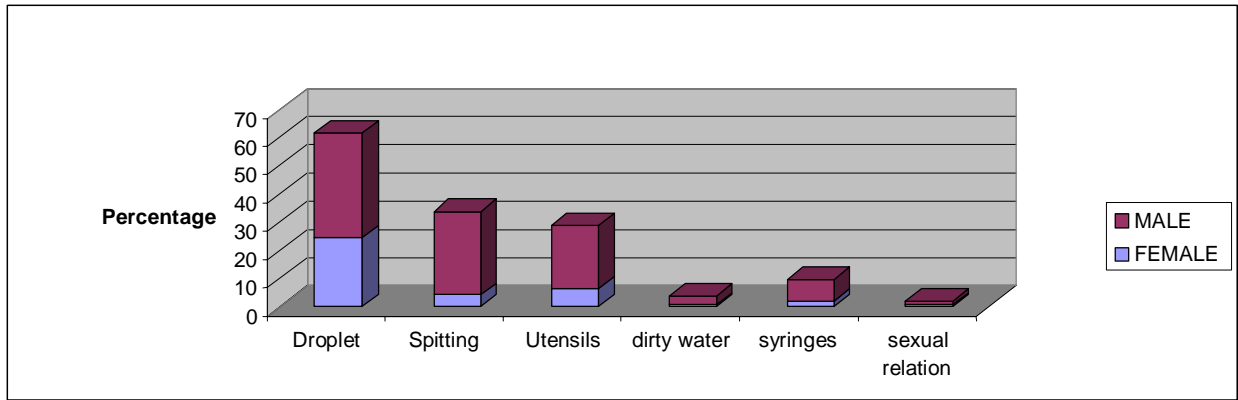
n=299

	<b>Don't know</b>	<b>Before Probing</b>	<b>After Probing</b>
<b>Male</b>	50(32.1%)	36(23.1%)	70(44.9%)
<b>Female</b>	25(17.5%)	9(6.3%)	109(76.2%)

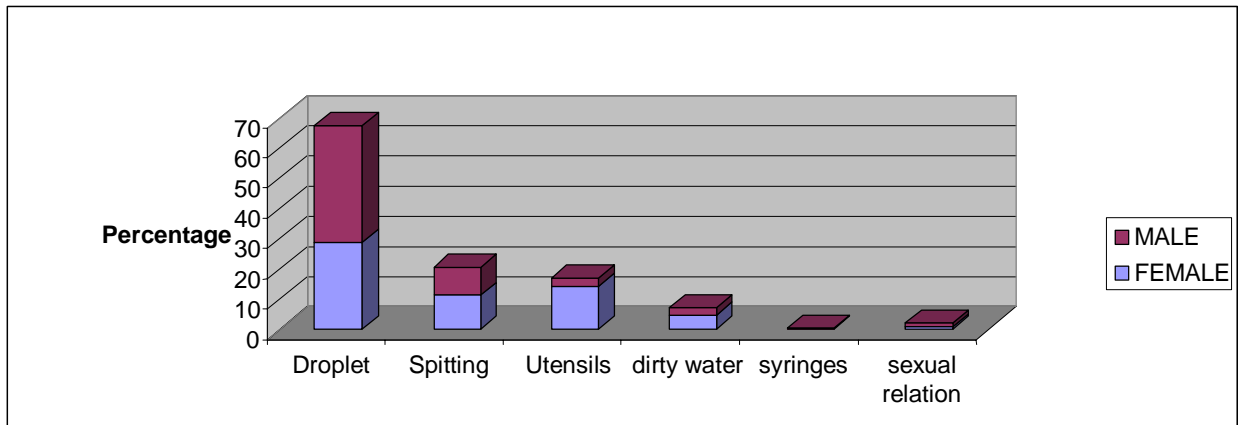
Chi square= 32.53      p value<0.001

Blood test was most commonly quoted in the urban areas, 61.6% males and 67.7% females. However in the rural areas a completely different pattern was seen whereby only 16.7% males and 3.5% females said that blood test can be used to diagnose TB. In the urban areas, 18.8% males and 33.2% females also give urine test as being diagnostic of TB. However in the rural area only 3% males and females talked about a urine test. A small minority 2 to 3% also gave ultrasound as being diagnostic of TB.

**Figure 1. Gender Perspectives on Spread of TB in Rural Areas**



**Figure 2. Gender Perspectives on Spread of TB in urban Areas**



We tried to gauge the knowledge of the participants regarding how TB is spread. In the rural area, 37.2% males and 24.5% females said that TB spreads by droplets while in the urban area 38.9% males and 28.8% females said that TB spreads by droplets. Spitting as a cause of TB spread was given by 29.5% males and only 4.2% females in the rural area. Interestingly in the rural area only 9% males and 11.5% females said that TB spreads by spitting. More rural males (22.4%) than females (6.3%) said that eating in the same utensils as a TB parent can help in spread of TB. In the urban area 14.2% females and 3.1% males felt the same. Other reasons for spread of TB including drinking dirty water, using a used syringes and sexual relations.

Very interesting observations were made regarding protective measures against TB. In the urban areas the knowledge about BCG in males was negligible (1.7%) as compared to 32.7% rural males ( $p < 0.0001$ ). In the females, both in urban and rural areas,

knowledge about BCG was negligible with only 4.9% urban females and 8.4% rural females knowing about BCG. Also very interesting was both urban males (27.9%) and rural males (22.4%) as well as urban females (23.9%) and (25.2%) rural females said that staying away from a TB patient was the best way to protect one self against TB, demonstrating the stigma against a TB patient. Males in both urban and rural areas did not consider using separate utensils how ever 13.7% urban females said that using separate utensils from a TB patient to protect one self against TB.

*Table19: Percentage distribution of how to protect against TB(females perspectives)*

<b>Measures to protect against TB</b>	<b>Urban (%)</b>	<b>Rural (%)</b>	<b>p value</b>
BCG	4.9%	8.4%	0.0002
By using boiled water	3.5%	0%	< 0.0001
Complete treatment of TB patient	7.1%	9.8%	< 0.0001
Separate utensils of TB patient	13.7%	2.1%	0.0001
Using anti TB Drugs	10.6%	0.7%	0.0001
Care to stay away from patient	23.9%	25.2%	0.6
Others	1.6%	0.7%	

*Table 20: Percentage distribution of how to protect against TB (male perspectives)*

<b>Measures to protect against TB</b>	<b>Urban (%)</b>	<b>Rural (%)</b>	<b>p value</b>
BCG	1.7%	32.7%	< 0.0001
By using boiled water	3.5%	3.2%	< 0.0001
Complete treatment of TB patient	14.4%	22.4%	< 0.0001
Separate utensils of TB patient	5.7%	8.3%	< 0.0001
Using anti TB Drugs	6.1%	4.5%	< 0.0001
Care to stay away from patient	27.9%	22.4%	0.002
Others	0.4%	0.6%	



Gender perspectives as to whether males or females are more affected by TB shows that in the rural area nearly 20% males and females said that males were more likely to get TB. While nearly the same results (24.1%) males and (30%) females were seen in the urban areas. However as regards female developing TB, 22% rural men said that females were more likely to get TB, while only 7.7% urban females thought that females are more likely to get TB. In the urban areas more respondents said that females are likely to develop TB i.e., 31% males and even more (46%) females said that women are more likely to get TB. The reason for this disparity and why males develop TB or why more urban females thought that women develop TB was probed further in focus groups which will be discussed later.

*Table 21: Percentage distribution of Knowledge about who is more prone to TB (rural area) .*

<b>Who is more prone to develop TB</b>	<b>MALE</b>	<b>FEMALE</b>	<b>p value</b>
Man	20.5%	25.2%	0.09
Woman	22.4%	7.7%	0.0002
Pre school children	5.8%	0.7%	0.01
School going children	3.2%	0%	0.01
Girls	2.6%	0%	0.01

*Table 22: Percentage distribution of Knowledge about who is more prone to TB (urban area)*

<b>Who is more prone to develop TB</b>	<b>MALE</b>	<b>FEMALE</b>	<b>p value</b>
Man	24.1%	30.1%	0.0001
Woman	31%	46%	0.002
Pre school children	1.3%	11.1%	0.0001
School going children	1.3%	8.8%	0.0001
Girls	0%	1.8%	0.0001

The urban rural disparity was quite manifest in gauging the knowledge as to which part of the body is most affected by TB. In the urban area, more males (39.9%) said the lungs were involved as compared to 26.9% in the rural area. Some men said that TB affects the chest (59.8%) urban and (45.5%) rural. In case of females, urban females were more knowledgeable and 47.8% said that lungs were involved as compared to only 13.3% females.

Around 41.2% females in the urban area said the chest was involved as compared to 19.6% in the rural area ( $p < 0.05$ ). Neither in urban nor rural areas, male or female were aware that kidneys, bones, digestive system, reproductive system could also be affected by TB.

*Table 23: Gender Perception regarding which part of the body TB affects.*

Before probing	Male		Female	
	Urban (%)	Rural (%)	Urban (%)	Rural (%)
Lungs	39.9	26.9	47.8	13.3
Digestive system	2.6	2.6	8.8	2.1
Reproductive organs	0	0	0	0
Bones	0.4	0	3.1	2.1
Kidney	10.5	0	12.8	3.5
Skin	0.4	10.9	0	3.5
Anywhere	2.6	6.4	31.7	4.2
Chest	59.8	45.5	41.2	19.6
Ribs	0.4	1.3	2.1	11.9
Neck	1.3	0.6	0	2.1
Liver	0	0.6	0	1.4

The majority of the respondents said that they would consult a medical doctor in case they develop TB. Nearly 90 to 93% males in the urban and rural areas as well as and 96% female in the urban area preferred medical consultation with a doctor. It was only rural females (5.6%) who said they would consult a traditional healer (Hakeem) but even they (79.7%) preferred visiting a doctor.

## Practices

The health seeking behaviour revealed that 46.8% rural males preferred to go to a tertiary care hospital if afflicted with TB as compared to 30% females ( $p < 0.05$ ). Nearly 50% males and female said that they would go to special TB hospital. In the rural area very few respondents said they would consult private doctors. In the urban area nearly (50%) males and females said they would visit a tertiary care hospital, while 28% males and 36.7% females said that they would go to special TB clinic. In the urban area private hospitals were preferred by a substantial number i.e. 17.9% males and 11.9% females.

*Table 24: Health seeking behaviour*

Before probing	Male		Female	
	Urban (%)	Rural (%)	Urban (%)	Rural (%)
Tertiary hospital	48.5	46.8	51.8	30.1
Private hospital	17.9	3.8	11.9	2.1
Government hospital	2.2	1.3	2.2	0
Special TB hospital	28.4	51.9	36.7	54.5

When asked when they would stop treatment, the majority of the urban respondents, males as well as females (65%) said that they would stop treatment whenever the symptoms end. This view was also expressed by 43% rural females. It was only 61% rural males who said they would take the advice of the doctor on when to stop the treatment. In the urban areas only ¼ of the respondents, emphasized the role of the doctor in giving advice as to when to stop treatment. A negligible percentage 0 to 1% said they would stop treatment if they would not afford it.

*Table 25: Reasons for stopping anti-TB treatment*

Before probing	Male		Female	
	Urban (%)	Rural (%)	Urban (%)	Rural (%)
When symptoms end	65.5	32.1	66.8	43.4
Cannot afford	0	1.9	1.3	0.7
Doctor advise to stop	23.6	60.9	23	21

The respondents were generally unaware of the exact duration of Tuberculosis treatment. A quarter of urban males and females said that the treatment lasted from 2-6 months 19-20%. Urban respondents and rural males said that the treatment was of 6 months to 9 months duration. Only 9.8% rural females said the treatment lasted from 6-9 months.

*Table 26: Perception on duration of Tuberculosis treatment*

Duration of treatment	Male		Female	
	Urban (%)	Rural (%)	Urban (%)	Rural (%)
Two to six month	23.1	11.5	23.5	2.8
Six to nine month	19.2	18.6	23	9.1
Nine month to 1 year	19.2	18.6	35	16.8

Different perspectives were seen between rural and urban areas regarding the outcome of a patient with Tuberculosis if he or she doesn't get treatment. In the urban area, both males and females predominantly said that the patient would die (79 to 85%) while some said that patient gets more ill (17%). On the other hand in the rural area 62% males and 42% females said the patient would die. 20% males said that the patient would get more ill as compared to only 6.3% females. Also 26.9% males and 11.9% females in the rural area said that this would affect other family members.

*Table 27: Percentage distribution of Knowledge about what happened if patient does not take TB treatment urban area*

Before probing	Male	Female	p value
Nothing	0.9%	2.2%	0.05
Patient get more ill	17%	17.3%	0.0001
Affect other family	3.1%	1.8%	0.0001
Patient will die	79.5%	85.4%	0.0001

Table 28: Percentage distribution of Knowledge about what happened if patient does not take TB treatment rural area

Before probing	Male (%)	Female (%)	p value
Nothing	4.5%	2.1%	0.13
Patient get more ill	20.5%	6.3%	0.0001
Effect other family	26.9%	11.9%	0.0001
Patient will die	62.2%	42.2%	0.0001

When asked if the TB patient can again be re-infected with TB after getting cured 6.6% males in the urban area as compared to 45.5% in the rural area said that he would not get re infected ( $p < 0.05$ ). In case of females the urban and rural perspectives were quite similar where by 24.8% in the urban and 33.6% in the rural area said that person would not get re infected by TB.

When asked what would be the effect on the newborn baby if the mother has Tuberculosis, in the urban area 50% males and 62% females said that the child would develop TB. Nearly 14% males and 13% females said that it would result in still birth of baby. In the rural area 40% males said that the baby would also develop Tuberculosis as compared to 17.5% females ( $p < 0.05$ ), Again 41% males also thought that the baby would be a still birth as compared to 17.5% females. rural females did not think that the mother having TB would have much impact on the mew born while rural males considered TB to have effect on the newborn. Others also mentioned low birth weight baby and premature births.

Figure 3: Effects on newborn when Mother has TB- Urban Perspective

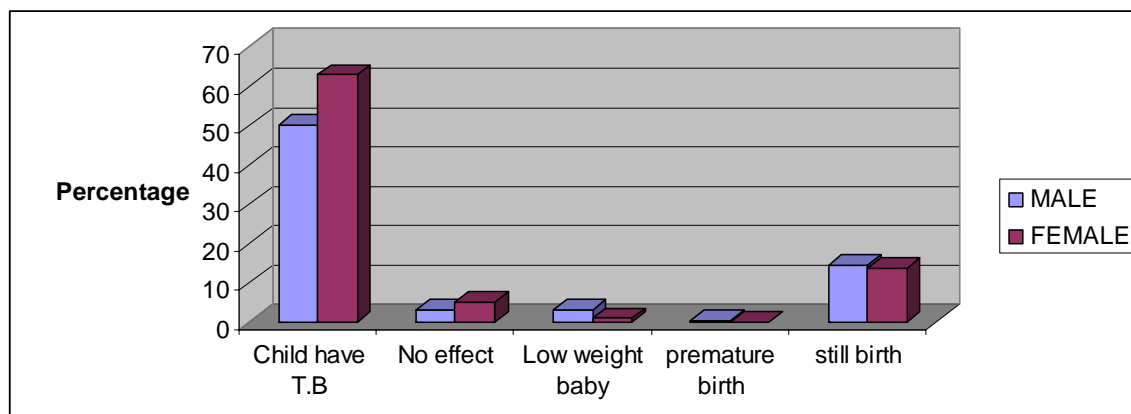
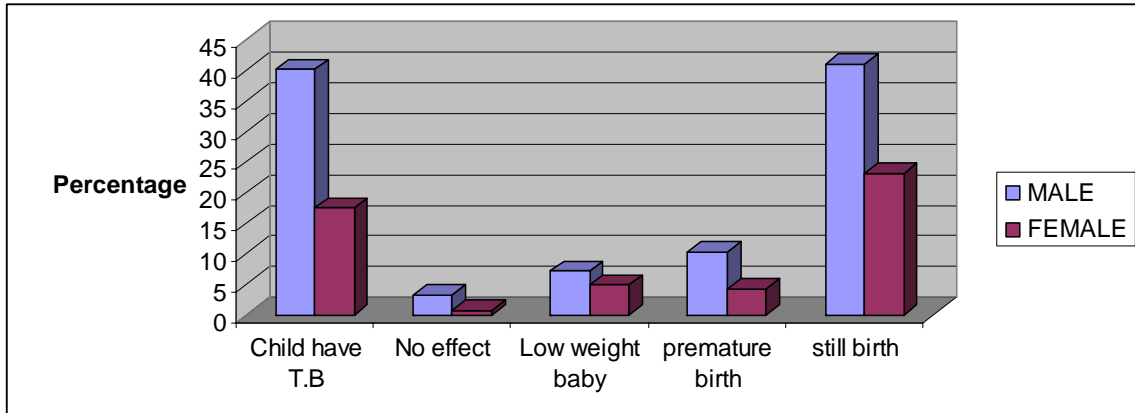
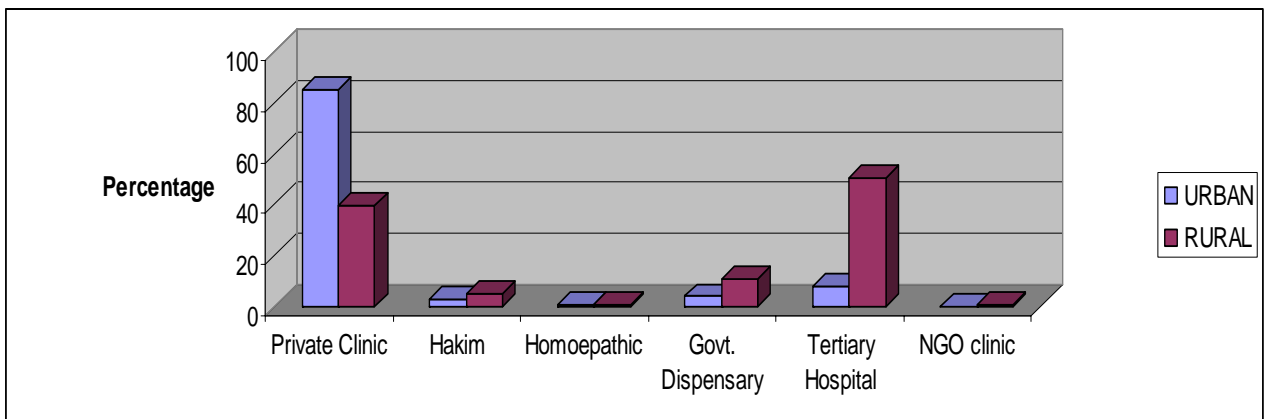


Figure 4: Effects on newborn when Mother has TB- Rural Perspective

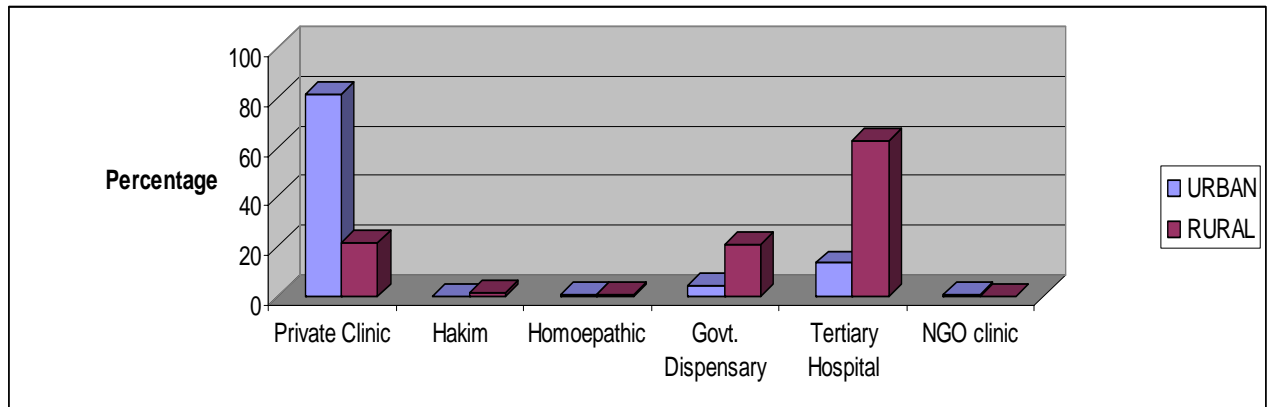


It was interesting to see that in the urban area 81% females preferred to go to a private clinic for treatment of minor illnesses as compared to 21.7% rural females. The majority of the rural females (62.9%) preferred to visit the tertiary care hospital as compared to only 13.3% urban females ( $p < 0.05$ ). In case of males a similar pattern was seen whereby 84.7% urban males preferred to go to a private clinic as compared to only 39.7% rural males. Most of the rural males went to tertiary care hospital (50.6%). rural males also went to hakims, homeopaths (traditional healers).

Figure 5: Health seeking behaviour- Males



**Figure .6 Health seeking behaviour- Females**



When asked with whom they would visit the health facility, only 28.7% rural females said they would go alone while 53% said they would go with their husband or family member (35%). In case of rural males the majority (72%) said they would go alone. In case of urban area, only 35.8% females were willing to go alone. It was interesting that 33.6% urban females said that they would need to be with their husband. While 55% said they could be accompanied by any family member. Both rural and urban females were generally reluctant to visit health facilities alone, more so rural females. They were to accompanied by husbands or other family members. Majority of the urban males (77%) also said that they would go to the health facility alone.

It was interesting to see that only 12-14% of all respondents except rural males (34.8%) had received information about TB, from either radio or television. This is a manifestation of groups of rural man watching television in hotels in villages. Nearly an equal percent of men in urban and rural areas had received information from newspapers (15%). Very few rural women (3.5%) received any knowledge about TB from newspaper. However 66% rural men as compared to 31% urban men had received knowledge about TB from their local doctor. Doctors had a limited role to play in providing health education in urban area. Friends were also an important source of information in urban areas.

Table 29: Source of Information on TB

Before probing	Male		Female	
	Urban (%)	Rural (%)	Urban (%)	Rural (%)
Radio/TV	14.8	34.6	14.6	11.9
Newspaper	15.3	14.7	12.8	3.5
School	1.7	0	0.9	0
Friends	27.5	3.8	16.8	1.4
Leader/Religious man	0	0	0	0.7
Patient of TB	6.1	1.3	15.9	1.4
Doctor	31	66	12.8	25.9

### Attitude Towards a Patient of Tuberculosis

When asked how they would feel if they develop TB, the majority of the respondents in the urban area, both male and female said they would be upset about it (50 to 54%). Anxiety was expressed by 42% females as compared to 17% males. In the rural area anxiety was expressed by 46 to 50% males and females. Very few urban females considered starting treatment (4.8%), but some men did consider starting treatment (18%). Similarly starting treatment was a low priority said in the rural area, while 50% females said they would be very upset about it as compared to 17% males. In the rural area only 7% males and 1% females said they would start treatment.

Table 30: Reaction of respondents to developing Tuberculosis by gender (urban areas)

Reaction	Male (%)	Female (%)
Feel Upset	54.14%	50.88%
Weakness	7.86%	11.50%
Feel Anxiety	17.46%	42.92%
Consider it as Gods wish	2.60%	2.65%
Start treatment	18.34%	4.86%



*Table 31: Reaction of respondents to developing Tuberculosis by gender (rural areas)*

<b>Reaction</b>	<b>Male (%)</b>	<b>Female (%)</b>
Feel Upset	17.94%	51.70%
Weakness	7.05%	2.79%
Feel Anxiety	46.15%	53.14%
Consider it as Gods wish	2.56%	0.60%
Start treatment	7.69%	1.30%

On inquiring with whom would she discuss her problems if she develops TB, the majority of urban females (48.23%) and rural females (55.94%) said that they would discuss this problem with their husbands. Many said they would also inform their immediate family. Only 10.6% urban females and 15.3% rural females said that they would discuss the problem with their doctors.

*Table 32: Who Will the Female Discuss her TB Problem with*

<b>Discuss TB Problems with</b>	<b>Urban (%)</b>	<b>Rural (%)</b>
Tell Doctor	10.61	15.3
Tell Parent/family	45.13	30.06
Husband	48.23	55.94
No body	2.2	1.4
Friends	0	0
Mother in-law	3.09	0.69

The response in males was entirely different whereby nearly 40.6% urban males and 57.05% rural men said that they would discuss the problem with their doctor. Nearly half of urban and rural men said that they would also discuss the issue with their family. Only 12.6% of urban men and 5.7% of rural men said that they would discuss the issue with their wife.

*Table 33: Who will the Male Discuss his TB problem with*

<b>Discuss TB Problems with</b>	<b>Urban (%)</b>	<b>Rural (%)</b>
Tell Doctor	40.6	57.05
Tell Parent/family	49.34	48.8
Wife	12.66	5.7
No body	3.49	2.5
Friends	1.74	0.64

When asked with whom would an unmarried girl discuss her problem with if she gets Tuberculosis, in the rural area females predominantly (80.4%) said she would discuss with her mother while 55% males felt the same. More males (98%) said she would discuss with the father as compared to 69% females. Nearly thirty to forty percent males and females said she would also discuss it with other family members. Interestingly in the urban area only 19% males and 27% females said she would discuss the problem with the father. The urban respondents predominantly said that she would discuss the problem with the mother (males 76% and females 91%). urban females were also more hesitant to discuss the issue with other family member (10%).

On inquiring who should an unmarried not discuss her problem with if she develops Tuberculosis. In the rural area males were more hesitant about discussing with neighbors (27.5%) or other family members as compared to females. More females 45.5% said that she should not discuss it with outsiders (people who are not family members or neighbours). In the urban area both males (65%) and females (41%) felt she should not discuss this issue with neighbors. Also both males (51%) and females (67%) said that outsiders should not know about it. In both urban and rural areas both sexes said that she should not discuss it with friend. The fear of social isolation by the community prompted the respondents to say friends, outsiders, or neighbours should not be told about the disease.

Figure 7. With whom should an unmarried TB patient not discuss her illness with (Gender perspectives) (rural area).

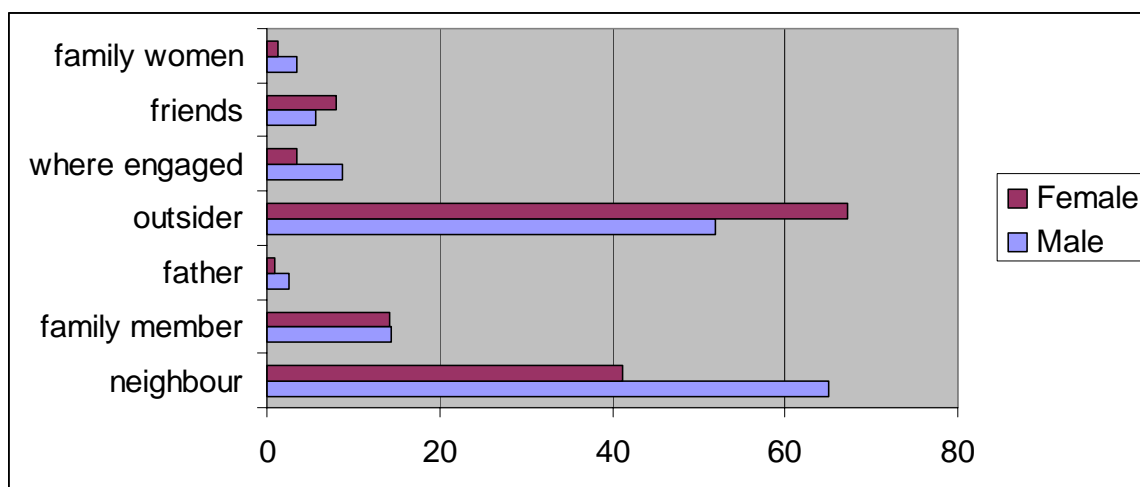
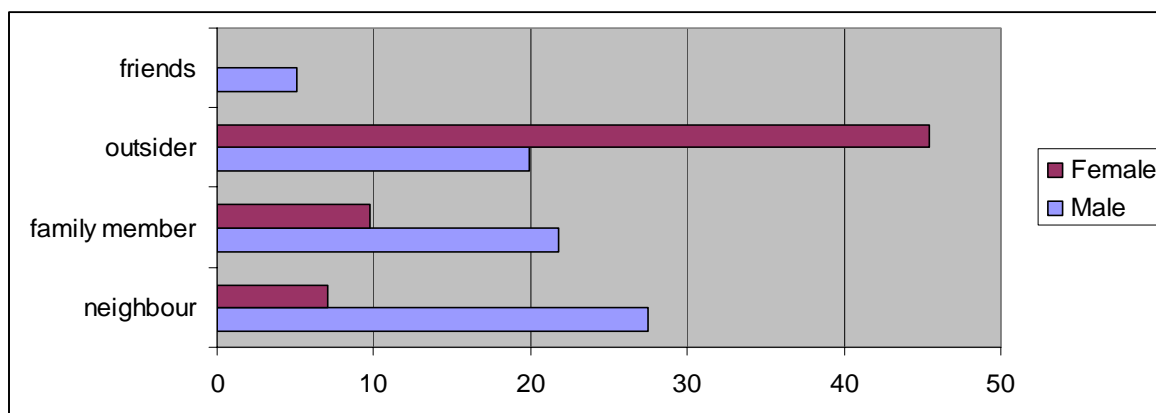


Figure 8: With whom should an unmarried TB patient not discuss her illness with (Gender perspectives) (rural area).



On inquiring whether in-laws should be informed if an engaged girl develops TB, 89.1% males and 95% females said that they should be informed. Similarly 89.5% males and 87.6% females said that the fiancée should also be informed.

Table 34. Gender Perspective of Whether In-laws Should be Informed if Engaged Girl Develops TB. (urban area)

	Male (%)	Female (%)
Yes	89.1	95.7
No	9.6	2.6
Don't know	1.3	1.7
N	229	226
Total	100	100

Chi Square = 9.61

p value < 0.001

Table 35: Gender Perspective Of Whether Fiancée Should Be Informed If Engaged Girl Develops TB. (urban area)

	<b>Male (%)</b>	<b>Female (%)</b>
<b>Yes</b>	89.5	87.6
<b>No</b>	10.04	11.5
<b>Don't know</b>	0.46	0.9
<b>N</b>	<b>229</b>	<b>226</b>
<b>Total</b>	<b>100</b>	<b>100</b>

**Chi Square = 0.27                      p value < .001**

In case of rural areas 89.5% males and 94% females said that the in-laws should be informed if the engaged girl gets TB. Incase of informing the fiancée it was seen that 16% males did not consider informing the fiancée as compared to 2% females.

Table 35: Gender Perspective Of Whether In-laws Should Be Informed If Engaged Girl Develops TB. (rural area)

	<b>Male (%)</b>	<b>Female (%)</b>
<b>Yes</b>	88.5	94.41
<b>No</b>	11.5	4.89
<b>Don't know</b>	0	0.7
<b>N</b>	<b>156</b>	<b>143</b>
<b>Total</b>	<b>100</b>	<b>100</b>

**Chi Square = 4.22                      p value < 0.001**

Table 37: Gender Perspective Of Whether Fiancée Should Be Informed If Engaged Girl Develops TB. (rural Area)

	<b>Male (%)</b>	<b>Female (%)</b>
<b>Yes</b>	83.33	96.50
<b>No</b>	16.02	2.09
<b>Don't know</b>	0.65	1.41
<b>N</b>	<b>156</b>	<b>143</b>
<b>Total</b>	<b>100</b>	<b>100</b>

**Chi Square = 16.90    p value < 0.001**

On asking how the husband would feel if his wife develops TB 54.1%, males said that they would feel bad about it as compared to 28% females. Similarly anxiety and sadness were the other reactions anticipated. Very few (1.76%) respondents said that the husband would take care of the wife. 14% males and 21% females said that the husband would take them for treatment. About 3.5% women thought the husband would marry again.

*Table 38. Gender Perspective On How Would The Husband React If His Wife Develops TB. (urban)*

	<b>Male (%)</b>	<b>Female (%)</b>
Feel Anxiety	13.97	16.81
Start Treatment	14.4	21.2
Feel Disturbed	54.14	28.76
Second Marriage	0.43	3.53
Take Care of wife	1.74	1.76
Feel Sad	16.15	24.33

In case of rural areas more men (44.87%) said that they would feel anxiety as compared to 23.7% females. Also a higher percentage of men (37.8%) and women (36.36%) said that he would start their treatment. 10% men said they would take care of their wives as compared to only 1.3% females.

*Table 39. Gender Perspective On How Would The Husband React If His Wife Develops TB. (rural)*

	<b>Male (%)</b>	<b>Female (%)</b>
Feel Anxiety	44.87	23.77
Start Treatment	37.82	36.36
Feel Disturbed	13.46	11.18
Second Marriage	1.28	2.79
Take Care of wife	10.2	1.3
Feel Sad	11.53	32.16

Different perspectives were obtained from urban and rural areas regarding how would the mother-in-law react if the daughter in-law develops Tuberculosis. More males in the urban area felt that she would behave badly towards her daughter in-law, (36.68%) which was also felt by 25.6% rural males. rural males also felt that she would feel sad (14%).

Seventeen percent rural males said she would not get affected. Urban males (41.9%) also said that the mother-in-law would feel very bad that their daughter-in-law has developed Tuberculosis which was in confirming with bad behavior they showed to her. Females in the urban and rural areas also expected bad behavior from their mother-in-law (urban 20.3% , rural 17.5%) and 32.3% urban females and 17% rural females said that mother-in-law would feel bad about it . Nearly 24.4% rural females said that she would get worried and 16% said that she would take care of her.

*Table 40. Reaction of Mother-in-law if daughter in-law develops Tuberculosis (male perspectives)*

<b>Reactions</b>	<b>Urban (%)</b>	<b>Rural (%)</b>
Bad behavior	36.68%	25.6%
Feel sad	8.2%	14.1%
Get worried	1.3%	5.1%
Send her to her parent	1.7%	3.2%
Take care of her	9.6%	12.1%
Good behavior	4.8%	10.8%
Feel bad	41.92%	18.5%
Not get affected	3.9%	17.3%

*Table 41. Reaction of Mother-in-law if daughter in-law develops Tuberculosis (female perspectives)*

<b>Reactions</b>	<b>Urban (%)</b>	<b>Rural (%)</b>
Bad behavior	20.3%	17.5%
Feel sad	13.2%	5.6%
Get worried	1.8%	24.4%
Send her to her parent	6.2%	4.8%
Take care of her	5.7%	16.08%
Good behavior	8.8%	4.2%
Feel bad	32.3%	17.48%
Not get affected	3.09%	2.1%

On the contrary, reactions of the father-in-law were slightly different whereby according to 35% males in the rural area and 11% males in the urban area they would start treatment for her, only 4.5% rural males said that he would behave badly towards the

daughter in-law. More urban males 35.5% said he would feel bad. Again in both urban (13%) and rural (24%) areas males said the father-in-law would feel very sad about it. Again few females 10% said that her father-in-law would behave badly with nearly 41% rural women saying that her father-in-law would start treatment. Again as in the case of the mother-in-law 31% urban women said that her father-in-law would feel bad. It is interesting that both in the case of father-in-law and mother-in-law the urban respondents said that the daughter in-law would be treated badly and the in-laws would take the news in a negative context and feel bad about it.

*Table 42: Reaction of Father-in-law if daughter in-law develops Tuberculosis (male perspectives)*

<b>Reaction</b>	<b>Urban (%)</b>	<b>Rural (%)</b>
Bad behavior	25.4%	4.5%
Feel sad	13.15%	24.3%
Ger worried about son	1.3%	5.7%
Look after get treatment	11.4%	35.2%
Feel bad	35.5%	17.3%
Good behavior	6.5%	14.7%

*Table 43. Reaction of Mother-in-law if daughter in-law develops Tuberculosis (female perspectives)*

<b>Reaction</b>	<b>Urban (%)</b>	<b>Rural (%)</b>
Bad behavior	10.7%	9.8%
Feel sad	14.2%	6.3%
Ger worried about son	1.3%	2.09%
Look after get treat	7.1%	41.9%
Feel bad	31.5%	6.9%
Good behavior	16.4%	5.5%

Most rural females (48%) felt that their friends and relatives would keep away from them as compared to 28% males. More rural males 29% said that they would feel sad and some even said that they might behave nicely with them (14%). This view was not shared by females. Similarly urban females felt that (28%) of their friends would stay away from them. Nearly 31% urban males and females said that their friend would feel sad. Bad behavior was expected by 35% males and 19% females in the urban areas. The reactions in

the urban areas were more strong representing stigma and would specially felt by urban females.

*Table 44: Behavior of friends and relatives towards a woman who develops Tuberculosis (rural area).*

<b>Reaction</b>	<b>Male (%)</b>	<b>Female (%)</b>
Stay away	28.90%	48.20%
Bad behavior	13.42%	16.30%
Feel sad	29.53%	8.50%
Look after her	9.39%	2.80%
Get scared	1.90%	4.80%
Feel bad	22.14%	11.34%
Behave nicely	14.09%	4.25%

*Table 45. Behavior of friends and relatives towards a woman who develops Tuberculosis (urban area).*

<b>Reaction</b>	<b>Male</b>	<b>Female</b>
Stay away	7.69%	28.31%
Bad behavior	35.09%	19.17%
Feel sad	31.73%	31.50%
Look after her	9.13%	4.56%
Get scared	0.50%	4.10%
Feel bad	21.15%	7.30%
Behave nicely	12.50%	15.52%

In the urban area most of the males said that the colleagues would behave badly (39.7%) if their female co-worker develops TB as compared to 11.9% female. However 45% females thought that they would be fired from their jobs. Women also felt that many colleagues would stay away from them (12.38%). Men generally felt that they would feel bad that such a thing had happened to their colleagues (32.3%) as compared to only 4.86% women.



Table 46: Reaction Of Colleagues if a Women Co-Worker Develops TB (urban area)

	<b>Male (%)</b>	<b>Female (%)</b>
Bad behaviour	39.73	11.94
Fired from Job	13.1	45.13
Help her get treatment	3.49	8.
Stay away from her	6.98	12.38
Feel bad	32.31	4.86
Good behaviour	5.24	5.30
Feel sad	6.1	5.75

In case of rural area less men 7.6% and less women 13.9% felt their colleagues would behave badly towards them. However as compared to urban areas more men (29%) felt that the woman would be fired from her job. 22.43% men said that their behavior would be good towards the woman

Table 47: Reaction Of Colleagues If A Women Co-Worker Develops TB.(rural area)

	<b>Male (%)</b>	<b>Female (%)</b>
Bad behaviour	7.6	13.9
Fired from Job	29.48	30.06
Help her get treatment	3.84	2.7
Stay away from her	26.9	8.3
Feel bad	13.46	8.3
Good behaviour	22.43	9.7
Feel sad	15.38	4.19

Asked as to how they would feel if their spouse develops Tuberculosis in both sexes, in the urban area said that they would feel very bad about it (64 to 67%). Slightly more females 20.5% said they would be shocked as compared to 15% males. 19 to 25% males and females said that they would make sure that treatment is started. More females in the rural area (65%) said that they would feel bad about it while more rural males (31%) said they would be shocked. As compared to urban areas, in the rural area more male and even more females said that they would start treatment of their spouse (38%) males and (53%) females.

Concerning the general attitude of the people towards a patient of Tuberculosis, 40 to 50% males and females in the urban area said that they would behave badly towards the patient. Nearly 17% females said that people would stay away from these patients as compared to 6.9% males. About 30% males said that their attitude would be good. In the rural area more females 41% said that people would behave badly as compared 25% males. 10% males said that people would generally take care of the patient, while 19% males felt that people would stay away from them, which was the opposite of the male perception in the urban area.

*Table 48: Reaction if Spouse develops Tuberculosis*

Reaction	Male		Female	
	Urban (%)	Rural (%)	Urban (%)	Rural (%)
Bad behavior	41.5	51.8	25	10.9
Good behavior	31.4	19.9	41.3	3.4
Take care	4.4	3.98	12.1	19.2
Stay away from patient	6.98	17.2	4.9	5.59

We tried to ascertain the health-seeking behavior of different sexes. In the rural areas 83% females consulted a doctor with in three days of on set of symptoms while 12% waited for one week. In case of males, 57.8% rural males consulted a doctor with in three days of on set while 18% consulted with in one week. They would generally buy the medicines form a nearby store. In case of urban areas again the majority 76% males and 59% females consulted a doctor with in three days of on set of illness. How ever 22% females waited for one week. urban females generally discussed their common illnesses with their husbands (42%) and other family members (46%). While only 9% males discussed their illness with their wives. The majority discussed the problem with other family members (38%) or the doctor (45%). In rural areas females generally discussed with their husbands (60%) or other family members. Males mainly discussed the problem with their doctor (55%) or other family members (39.4%).

To determine if it is possible to go to hospitals to get treatment for TB on a regular basis nearly 30.5% urban females said that they would not be able to go to the

hospital, while 90% males said they would go to the hospitals. In the rural areas 65% males said that they would be willing to go to the hospital to get treatment, while 70% rural females did not agree to go to the hospital to get treatment. Only 27% males and 38% females in the urban area said that they would allow an outsider to come and give the medicine to a TB patient. Of them half of them said that only a doctor can come, while nearly a quarter said that only a female can come. On the contrary in the rural area nearly 63% males and 86% females said that an outsider would come and provide the TB medicines. However 80% of them said it should be a doctor or a woman. Rural respondents were more open to allow outsiders to come to the house to provide medicines.

## Focus Group Discussions

One focus group was held for males each in urban and rural areas, and one for females in urban and rural areas. To elicit the gender differences, the male and female perceptions in urban and rural settings will be discussed separately.

### Urban Area

#### 1.1 *Initial reaction to Tuberculosis as a disease.*

Most of the women said that TB is a dangerous illness spreads by contact from one person to another. The households members need a lot of patience to continue the treatment of the TB patient in their own house. Few women thought that once someone develops TB, it means a death sentence for him, as TB is incurable.

**“A TB patient should start counting his day” (woman: Baldia Town)**

The male participants also agreed that TB was a dangerous illness, however they expressed being more informative than the females by saying that it can cause a spot in the lung. They also associated TB with blood in the sputum. Some men did agree that TB was a fatal illness but many aware that it was now curable and,

**“Proper treatment can remove the illness from its roots” (man in Baldia Town).**

#### 1.2 *Perceptions about which people generally contract the disease and why?*

It was interesting to note that most of the participants whether males or females felt that TB generally affects drug addicts. Some females felt that males are more affected because they tend to spend more time outside their houses, come in contact with more people and are more likely to be drug addicts. Anxiety and depression have always be associated with chronic illnesses. This was manifest in linking TB with women and anxiety. Since the women in the Pakistan society are considered to be the silent sufferers, many women participants said that TB chiefly affects house wives, who bear suffer silently at home and have no means of giving vent to their frustrations **“Internal**

**frustrations eat the women from inside and then TB attacks them” (woman, Baldia Town)**

Female participants also felt that since young children and toddlers tend to stay at home with their mothers, they were also more likely to contract the disease from their ailing mother. Poverty as an important risk factor for Tuberculosis was expressed by all the women participants, but only some male participants. The concept that TB is a respiratory tract disease, was manifest in the observation of both male and female participants who said that

**“TB chiefly affects people who have frequent episodes of cough and running nose, as well as those who have asthma”.**

Most of the participants felt that asthma finally leads to the development of TB.

### *1.3 Social Isolation of a TB Patient*

It was interesting to note that all the participants felt that a TB patient should not be abandoned especially by their near ones.

**“Can we stay away and leave our parents, our children, our near and dear ones who suffer from TB”.** (woman from Baldia Town).

Both men and women felt that moral support is important for a TB patient. However, men more than women felt that although they would continue to meet with the TB patient they would still try to keep the patients utensils, plates, glasses and clothing and bedding separate as they felt

**“prevention is better than cure”.**

### *1.4 Perceptions on eating together with a TB patient.*

All men and nearly 75% women said that though they would eat at the same table as the TB patient, they would make sure that the patients’ utensils plates, glasses were kept separate. However, 25% women felt that they would not keep the patients utensils separate and would eat with her/him. They felt that such obvious discrimination would hurt the feelings of the TB patients. Women generally were more concerned about the feelings of the TB patient, than men.

*1.5 Reaction of parents on their child developing TB. Perception on an unmarried adolescent girl developing TB.*

With respect to their child developing TB, both men and women said that being parents they would get extremely worried and would try their best to get the best possible treatment for their children whether boys or girls. The issue of a young girl developing Tuberculosis is however different. TB is generally considered a “*Moozli*” (in Urdu) illness, a chronic debilitating disease. Both male and females felt that this would greatly hamper the girl prospects of getting married. According to some women

**“The girl would become useless for life”.**

The social impact of a young girl developing TB was considered to be much more strongly by women.

*1.6 Reaction of the participants if they find out that their daughter - in - law has contracted TB.*

Completely different perspectives were expressed by males and females. Most of the females said that the mother-in-law starts behaving badly towards the daughter in-law once she finds that she has developed Tuberculosis. The mother-in-law also starts worrying about her son as well as grand children. She feels that the grand children might all get affected by TB. According to some women, the mother-in-law might help in starting treatment because she feels that her son might also contract TB. Hence to protect her son she will try to get the daughter in-law treated, although in her hearts of heart she will be very disturbed. On the contrary, all men unanimously agreed that the daughter-in-law is their responsibility and they would take full care of her and provide her with the best of treatment. They said they would like to ensure that their grand children are not affected by TB.

*1.7 Reaction of the participants if they find out that their prospective daughter - in - law has contracted TB, Would the engagement break?*

Nearly 75% of the women felt that in such cases the engagement would break as no one would like their coming generations to be affected with TB. According to very few women

## **“All five fingers are not equal”**

In some cases the in-laws would wait for the daughter in-law to complete the treatment and then get their son married to her. This would happen in cases where the boy is educated; other wise the in-laws generally break engagement. In case of males some men said that they would not hesitate to get their sons married to the girl even if she had Tuberculosis and would make sure that they get their daughter in-law treated. However, most men felt that TB was familiar and they would break of the engagement, as they did not want their future generations to be affected with TB.

### *1.8 Reaction of the husband if wife develops Tuberculosis?*

Generally all women agreed that men generally do not treat their wives very well if they develop Tuberculosis. His whole behaviour towards his wife changes. In very rare instances he might look after his wife and take care of her. Most of the men on the other hand agreed that they would take care of their wife. They would eat on the same table but would use separate utensils. She will have to sleep separately and even the children would not be allowed to sleep with her. They would not send her back to her parent's house how ever they would ensure that she received the right treatment.

## **Rural Area**

### *2.1 Initial reaction to Tuberculosis as a disease.*

The females said that if this illness affects any member of the family it means that the whole family will now get affected. They felt that TB is a chronic illness, very difficult to treat and only God will be able to help the patient and the relatives. Most of the women said that once the patient develops TB, he will soon die. Death was the first thought which came to the minds of most women. According to the males, though TB is a dangerous illness and can lead to death, it is now possible to cure a TB patient and treat it completely. Some men associated TB with blood in sputum. Few men associated TB with death.

## *2.2 Perceptions about which people generally contract the disease and why?*

According to most women though TB can attack men, women and children equally, it generally affects men more because men tend to stay out of the house most of the time and come in contact with a lot of outsiders who may be harboring the TB germ. Also some women associated Tuberculosis with drug addiction. Males also agreed that TB affects men more because drug addiction predisposes to TB and men are more prone to be drug addicts. Besides males also said that TB affects poor people, since the poor are weak and germs can attack them easily.

## *2.3 Social Isolation of a TB Patient*

There were two contradictory views expressed by women. Some of the women said that they will not cut of social contact with the TB patient. However they would take care and not use the same utensils or same clothes. However, some women perceived TB as “Gods punishment” for women who are sinful and they thought that this was Gods way of punishing these women. Males on the other hand said that they will continue meeting with the TB patient but they will take care and not take the use utensils.

## *2.4 Perceptions on eating together with a TB patient.*

Many women said that they will eat on same table as a TB patient but will keep their utensils (plates, glasses) separate. The women who considered TB to be a punishment of God said that they will keep away from these TB patients, as they had probably committed sins for which they were being punished and they did not want to associate themselves with such women. Men also felt that though they will eat with the TB patient they will keep their cups and plates separate. They felt that this should be done in a very subtle manner so as not to hurt the feelings of the patient.

## *2.5 Reaction of parents on their child developing TB. Perception on an unmarried adolescent girl developing TB*



Women were emphatic that they would not spare any effort to get their child treated

**“If God forbid our child develops TB we will feel that life has ended for us. We will even sell our house, property and everything we own, and spare no expense to get our child treated.”**

In case of an unmarried girl they all expressed the apprehension that this illness will affect the prospects of her getting married. Developing Tuberculosis is a stigma for an unmarried girl. Males expressed the same feeling that if their child develops this dangerous illness they will go out of the way to get her treated. Being the father they will suffer extreme depression and will feel extremely sad. They also considered TB to be a stigma against a unmarried girl, hampering her marriage prospects.

#### *2.6 Reaction of the participants if they find out that their daughter - in – law has contracted TB.*

Most women stated very categorically that mother-in-laws are generally bad and they are always looking for an excuse to get rid of their daughter-in-law. Once the daughter in-law develops TB, the mother-in-law will immediately use this as an excuse to kick her out of the house. Very few said that mother-in-law will take care of her. Men on the other hand said that the daughter in-law is their sons wife and all future generations will be affected by her health. Since they would like their family’s name to be carried forward, they will try to get best possible treatment for their daughter in-law.

#### *2.7 Reaction of the participants if they find out that their prospective daughter - in - law has contracted TB would the engagement break?*

Rural women generally said that no one would like to see their prospective daughter in-law being afflicted with TB and would immediately break the engagement. They are very clear that no one will marry an ill girl. rural men as opposed to urban men said that they will break off the engagement because if a chronically ill TB patient comes in their family all other family members will also be affected. Some men did say that they will wait for the illness to be treated and then get the girl married.

### *2.8 Reaction of the husband if wife develops Tuberculosis?*

Rural women expressed strong emotions in this context and said that it depends upon individual, but if the husband is not a good man then he will not take care of his wife and will kick her out of the house.

**“He will leave his wife on the streets to die”**

But some women did say that if the husband is caring he will look after the wife and start the treatment. Men on the other hand said that their wives are their responsibility and they will ensure that they provide proper treatment to their wives.

## **Females Perspectives in Urban and Rural Settings**

### *1.1 Reaction of father-in-law if daughter in-law develops TB.*

In the urban area most females said that father-in-laws are generally good but mother-in-laws “poison the ears” and hence their behaviour towards the daughter-in-law which initially good may change. According to rural women the man is the master of his house and hence if he behaves nicely towards his daughter in-law, the mother-in-law will also alter her behaviour.

### *1.2 Medical care in case of minor illness (coughs or fever)*

Urban women said that they generally took the medicine e.g. Ponston or cough syrup from the medical store near by because they are very busy and have no time to go to the doctor. However, if they don't feel well in the next two three days they consult the doctor. In case of cough or fever if it persists for more than two weeks they consult the doctor. Some women said that husbands do not like ill wives. Therefore they consult a doctor soon. Rural women said that they consult the doctor in a public hospital or Hakim immediately because if they are unwell who will do the house work and also husbands get upset if their wife is ill. Even in case of cough or fever rural women consult the doctor or Hakim immediately.

### *1.3 Permission to visit medical practitioner*

Most urban married women said that they can only visit a doctor alone in case of severe emergency when there is no one at home. Generally some family member should accompany the woman to the doctor or if no family member is available either the neighbor or friend could accompany her. In case of an unmarried girl, she should under no circumstances visit the doctor alone. She should always be accompanied by a friend or a relative. rural women were more staunch in their belief and said that the married woman can never go alone to the doctor. In fact according to them she should always be accompanied by a family member and in their opinion should not even go to the doctor with friends. The same applied to an unmarried girl, who would under no circumstances be allowed to visit a doctor alone.

#### 1.4 *Health seeking behaviour in case of TB*

Most of the urban women said that they would visit the tertiary care hospital to seek treatment for Tuberculosis. Some said that they would go to private practitioners. rural women on the other hand said that they would either go to the special TB clinics or go to the nearby RHC where TB medicines are available.

#### 1.5 *Completion of TB treatment.*

Most urban women said that they would generally stop treatment when the symptoms subside, whether it is a boy or a girl. Some urban women did say that they would follow the advice of the doctor and stop treatment when ever the doctor advices. rural women on the other hand said that they would continue treatment as long as the symptoms are present. They felt that this was completion of treatment.

#### 1.6 *Health seeking behaviour incase of TB*

Most of the urban women said that if the doctor asks them to take anti TB medicines in front of a responsible person then they would only allow a family member to give them the medicine. However, if the doctor assigns some other responsible person in whose presence they should take the medicine, they would only do so in the presence of a family member. In response to whether any person could come to the house to administer the medicine, they said that only a doctor is allowed to come to the house. rural women said that only a family member can help in administering the medicine. They would not allow any outsider come to the house even for medical reasons except a doctor. urban women though reluctant to go to the health center to get anti TB medicine said that they might do it twice or thrice a weak. However the rural women said that they can only go twice a week with a family member to the health center to receive anti TB treatment.

## **Male Perspectives in Urban and Rural Settings**

### *2.1 Permission to wife to visit health facility alone*

Most of the men said that they always try to accompany their wife to the health facility and do not allow their wives to go to the health center alone. rural men said that even for routine daily work their wives are not allowed to leave the house alone, so even in case of a visit to the health facility they will either accompany their wife or ask any other family member to accompany her.

### *2.2 Health seeking behaviour for TB treatment*

Urban men said that if God forbid their wife develops TB, they would allow her to visit the health facility but not alone and would always ensure a family member is accompanying her. In case, a health person has to come to the house to give the medicine then they will only allow a female whether a doctor or health worker to come to the house. They were hesitant to allow a male doctor come to the house but would agree in special circumstances. rural male said that they would allow the woman to go to the health facility not daily but twice or thrice a week but only in the company of a family member. As regards an outsider coming to the house to give the medicines they would only allow a female to come to the house and would not even allow a male doctor to come to the house.

## **In-depth Interviews**

In depth interviews were conducted with general practitioners (GP), Traditional birth attendants (TBA), local health worker (LHW), Community activist, Community based organizations (CBO) workers and TB patient both in urban and rural settings.

### 1.1 *Perceptions about who is more prone to TB. (urban area)*

According to general practitioners TB chiefly affects women who stay within the confines of the house and suffer from anxiety. TBA thought the same and said that women are more prone because they suffer from anemia and during delivery used syringes are applied on them which makes them susceptible to TB. The LHW said that TB affects family member mainly in houses where many people live together. It can affect men as well as women, but men more because they may be drug addicts. The community activist and TB patient said that men are more affected because they smoke and stay out of the house where they come in contact with more patients; they also associated TB with poverty. The CBO worker also associated TB with cigarette smoking and poverty.

### 1.2 *Perceptions about who is more prone to TB. (rural area)*

According to the general practitioner in the rural area, male are more prone to develop TB. The same views were shared by community activist. They felt that men were more inclined towards drug addictions which predisposes to TB. The CBO worker also shared the view that males are more affected but attributed it to cigarette smoking. He also thought that TB is a hereditary illness and can affect several family members. The TBA and the LHW said that it could affect both males and females. According to the TB patient, in the rural area women were more prone because they were generally neglected.

### 2.1 *Reaction of family if a family member develops TB. (urban area)*

The general opinion was that the family would become anxious and would be disturbed about it. The TBA and LHW said that they would stay away from them and would keep their utensils separate. The community activist said that not only would they themselves stay away from the TB patient but also would be scared that other people will stop meeting them. The general practitioner on the other hand thought that the family members don't care about any family member who develops TB.

## *2.2 Reaction of family if a family member develops TB. (rural area)*

In the rural area all the respondents said that the family will be very disturbed and will feel sad if their kin develops TB. The GP, TBA, LHW and community activist said that the family would initially be upset but then start treatment. According to the CBO worker they would try to take the patient to private clinic or special TB clinic or where ever he/ she would get the best treatment.

## *3.1 Reactions if respondents themselves were to develop TB. (urban area)*

Interesting observation was made by all respondents. The GP said he would be confused. The TBA thought he would loose interest in life because people will shun him. The LHW said she will loose his desire to live. The community activist thought he will develop an inferiority complex. The CBO worker said he will think that the time has come to die. The TB patient said that he was very upset that such a dreaded illness has afflicted him.

## *3.2 Reactions if respondents themselves were to develop TB. (rural area)*

The responses in the rural area were more less similar where by all respondents said that they would be very upset and disturbed. Mostly they said that they would consider it to be a “death sentence”. The GP said the TB patient thinks he will never get cured and will die.

## *4.1 Would the perception of a female TB patient may differ form a male TB patient. (urban area)*

The female respondent i.e. the LHW and TBA said that the women would be more anxious and upset because she will not be able to look after the house, her husband would start getting irritated from her and since she is not allowed to go out of the house as much as a man she will feel more frustrated. The community activist and CBO worker said reactions of the male and females would be similar. The GP made the interesting observation that women are generally unaware and hence they would feel very disturbed.

#### *4.2 Would the perception of a female TB patient may different form a male TB patient. (rural area)*

Interestingly all the rural respondents said that the male and female will have similar emotions and will feel as disturbed. Except the LHW who said that the women will feel more upset.

#### *5.1 Reactions if an unmarried girl develops TB. Her prospects of marriage (urban area)*

All the respondents except the general practitioner said that the parents would be very disturbed and anxious and would try to get her the best possible treatment. However, they all agreed that because of the socio cultural stigmas the prospects of this girl getting married would be greatly hampered. No one would like their son to get married to a girl with TB. According to the community activist people will think that she will bring TB in the family. On the other hand, if she is engaged then all agreed that the fiancée will break the engagement. The GP on the other hand said that “she will take care of herself” and there will be no problem in her marriage.

#### *5.2 Reactions if an unmarried girl develops TB her prospects of marriage (rural area).*

All the rural respondents unanimously agreed that the parents would feel very sad and anxious and would feel that because of this stigma, their daughter will never get married. They will try their best to get their daughter treated but as far as marriage is concerned they would feel that their daughter’s marriage prospects are doomed. In case the girl is engaged, the fiancée will definitely break the engagement. This view was shared by the general practitioner in the rural area as opposed to in the urban area.

#### *6.1 Reactions if a married women develops TB (urban area).*

Most of the respondents said that the husband would get worried and would start her treatment. The TBA and the community activist said that the husband will specially start treatment because he will be afraid that the children might get affected. According to the LHW the in-laws will start behaving badly towards her. The GP felt that the husband will not care about her.



## *6.2 Reactions if a married women develops TB ( rural area)*

Most of the respondents felt that the whole family of the married women would be disturbed and the children will be affected. This view was also shared by the GP. The CBO worker said that people will avoid socially mixing with the family. All felt that the husband will get very worried and will start treatment of his wife.

## *7.1 Reactions of in-laws if a married women develops TB ( urban area)*

The TBA and the LHW said that the mother-in-law will treat the daughter in-law badly and might even kick her out of the house. This view was shared by the community activist. The CBO worker said that she might help her getting treatment. According to the GP the mother-in-law will not care. As regards the father-in-law, the TBA and the LHW said that he will treat her better than his wife and will start her treatment. According to the community activist and the TB patient he will do as his wife (mother-in-law) does.

## *7.2 Reactions of in-laws if a married women develops TB ( rural area)*

The GP, the TBA and the LHW said that the mother-in-law will treat the daughter in-law badly and will kick her out of the house. The LHW also thought she will try to get her son married again. The TB patient said that she will be worried about her son and will start treatment so that her son and his children are not affected. All felt that the father-in-law is much more considerate and will look after the daughter in-law and start her treatment. The LHW and community activist said that their father-in-law will do as the mother-in-law will ask him to.

## *8.1 Reactions of people towards a TB patient, in urban area.*

All the respondents said that people avoid meeting a TB patient and stay away from him. According to the TBA and LHW they do that because they feel that TB will also afflict them. In addition they also said that they keep their utensil separate from the TB patient.

## *8.2 Reactions of people towards a TB patient, in rural area.*

The rural respondents were more emphatic in their views and said that people will completely isolate themselves from a TB patient. The TBA and the community activist said that a strong stigma is attached to a TB patient and no one likes to eat on the same table as the patient and they keep their utensils separate. This view was also shared by the GP.

## *9.1 Predisposing factors towards TB, cultural beliefs associated with TB, ( urban area)*

All the respondents said that TB chiefly affect low income families, the LHW said that this was due to the fact the poor live in unsanitary conditions. According to the GP a TB patient in the family predisposes to Tuberculosis. The TBA said it was due to anemia and weakness. The LHW said that cigarette smoking and unsanitary conditions lead to TB. The community activist and a CBO worker both said that poverty, anxiety and drug addiction predisposes to TB. Interestingly the TB patient said that foods with lots of fat lead to TB. Except the CBO worker no one agreed that magic or evil spells had a role to play in Tuberculosis. According to the community activist they have heard from older family members that TB is familial illness, while the LHW said that the elders in the family stop them to smoke “HUQA” (a traditional instrument for smoking). The TBA, LHW, CBO worker all said that the elders say that TB is in cure able and there is no treatment for TB.

## *9.2 Predisposing factors towards TB, cultural beliefs associated with TB, ( rural area)*

It was an interesting that the rural GP also said that drug addiction predisposes to Tuberculosis. This view was also expressed by the community activist, who in addition said that people who stay in cold climates develop TB. The TBA and community activist said that frequent acute respiratory infections predispose to TB. They all agreed that poverty leads to TB. According to them the village elders said that frequent cough and cold finally results in TB. Since they all considered TB to be associated with acute respiratory infection they said that a patient of cough or runny nose should take care that his symptoms and not allow it to get worst, other wise it will deteriorate to TB.

### *10.1 Health seeking behavior incase of TB (urban area)*

According to the TBA, the TB patient should go to the tertiary care hospital. This view was shared by the community activist. The GP, LHW, the TB patient and the CBO worker said that they should go to the nearby private doctor.

### *10.2 Health seeking behavior incase of TB in rural area*

It was interesting that in the rural area all the respondents said that the best place to get treatment is a government hospital, either a rural health center or a tertiary care hospital. Only the CBO worker said that he should go to the private doctor.

### *11.1 Duration of treatment of TB patient in urban area*

The GP said it takes six to nine months. The TBA thought it takes three months, while the LHW and the TB patient said that it takes nine month. The CBO worker and community activist were unaware of the duration of treatment.

### *11.2 Duration of treatment of TB patient in rural area*

The rural GP said that it takes six months. While the TBA, LHW, community activist and even the TB patient said that only the doctor knows how long it takes. The CBO worker said it might take even six year.

### *12.1 When should a TB patient stop treatment in urban area*

According to the GP, TBA and LHW the TB patient should finish treatment when the doctor advices. But according to the community activist and the CBO worker he should stop treatment when the symptoms subside.

### *12.2 When should a TB patient stop treatment in rural area*

In the rural area only the GP said that the treatment should stop when the doctor advises. According to the TBA, LHW, community activist and CBO worker, treatment should stop when the symptoms subside.

### *13. Knowledge about DOTS*

In the urban area only the GP had heard about the DOTS program. Neither the TBA, LHW, TB patient, community activist nor CBO worker had heard about the DOT program. In the rural area, the GP knew about the DOTS program. In addition the TBA the CBO worker, LHW and the TB patient said that DOTS program was being implemented in the near by health facility. Only the community activist had not heard about the DOTS program.

### *14. Provision of TB medicines at home by outsider*

According to the GP, in the urban area it is possible for an outsider to come and give medicines at home. However the community activist, CBO worker, LHW and the TBA said that only the family member should give the medicine and no outsider should come. In the rural area people were more open about allowing outsider to come and give the medicine but it should be done in the presence of the family member and should essentially be a female.

### *15. Permission to visit health facility to take medicine in presence of health care provider.*

According to the GP, in the urban area the women would be allowed to go to the health facility to take medicine if the medicines are free. However according to the TBA, LHW, TB patient and CBO worker, the women would not be allowed to go. The community activist said that if the family member accompanies her she can go. In the rural area the GP said that she might be allowed to go with the family member. However, the TBA, the LHW the TB patient and the CBO worker said that it will be very difficult for her to go if necessary she might be allowed to visit once a week in the presence of the family member.

## Discussion

The overall knowledge regarding Tuberculosis has been found to be extremely deficient in both sexes, but particularly so in rural females. The respondents' perception about the disease, indicate the socio-cultural trends prevalent in our society as well as a lack of correct information about the disease. Several important trends regarding the basic knowledge as well as the social perceptions pertaining to gender differences as well as urban-rural disparity have been highlighted through this study.

The perceived symptoms of TB were generally referred to as simple cough or prolonged fever. Very few respondents talked about weight loss or night sweats. Rural females were generally unaware of symptoms like blood in the sputum. The perceived causes of Tuberculosis varied from germs to dirty water as well as many respondents associated TB with drug addition, which is an interesting observation. Smoking and alcohol consumption have also be cited in several other studies conducted in Kenya, Philippines and Bombay (22,23,24). Tuberculosis is said to afflict persons indulging in vices, which indicates the negative perceptions held by the respondents. Similar beliefs on perceived causes of Tuberculosis are present in other countries – smoking and alcohol consumption in Nepal (Smith et al, 1994) (25). Smoking in Sierra Leone (Collier et al 1993 (26). Worry and anxiety, especially frustration in females was also attributed to promoting Tuberculosis. A gendered trend is promoted whereby women are portrayed as “silent sufferers” adopting a fatalistic attitude with a disturbed mental health leading to physical ailments. Women in cultures like the Pakistani culture face the stress of living in poor unhygienic conditions and bear the stress of raising their children and running the house hold within an inadequate income. Several studies have attributed weakness and morbidity in women to anxiety and stress (27). Tuberculosis is therefore perceived as another physical manifestation of mental anguish.

Spread of TB by droplet infection was attributed more by males than females. Rural females were more concerned about sharing of utensils and bedding with a TB patients. Most respondents were aware that TB is a contagious disease and “sharing with a TB” patient was considered a major reason for its spread. This finding is supported in other studies from Kenya and India (22,24). This point was further elaborated in both the male

and female focus groups, whereby a married women with Tuberculosis was expected to sleep away from her husband and children and to keep her clothing and utensils separate.

Knowledge about BCG as a preventive measure against Tuberculosis was very limited except in 32.7% rural men. Again a substantial number of rural men (22.4%) and some urban men (14%) said that completing the treatment of a TB patient helped in preventing other members from developing TB. The rural females generally had little knowledge on means to protect against TB.

TB was considered a dangerous disease, to be feared and chiefly associated with death. A previous study in Pakistan (19) confirms these finding in which patients with Tuberculosis considered it to be a disease to fear. Long et al reported from Vietnam that patients especially female patients suffering from Tuberculosis could only think of death as a sequelae to Tuberculosis. In Kenya the local terms used to describe Tuberculosis emphasized the concept of a chronic fatal disease (24). In our study while the females considered TB to be fatal disease, most men said that though TB was a dangerous illness, it was curable. Hence, besides anxiety, the reaction of most males was to start treatment of the TB patient, while most females expressed emotional sentiments of distress, anxiety, sadness.

The dangerous nature of Tuberculosis was linked to the stigma associated with the disease and social isolation. In case of an unmarried adolescent girl, all the respondents unanimously agreed that her marriage prospects would be hampered. Similarly, respondents also expressed the view that if TB affects an engaged girl, her engagement with break off. Since many people considered TB to be familial or hereditary and they were apprehensive that it could be passed on to future generations. Long et al from Vietnam pointed out that not only the girls prospects of getting married diminish but also marriage prospects of other sibs are affected because people generally perceive Tuberculosis to be a familial disease. In a study in Philippines informants described TB as being shameful and a “bad mark on the family” (28). In case of a married woman, especially in the rural area, women expected to be treated badly by the in-laws and in extreme cases to be kicked out of the house. Similar finding were noted in the study conducted by Liefoghe in Sialkot, Pakistan, where female TB patients feared rejection and divorce by their husbands and therefore tried to hide the illness from the family (19).

Many female respondents feared social isolation, and rejection by colleagues and friends. Although medically, isolation of a TB patient is justified in the first weeks of anti-TB treatment (after 2 weeks of intensive treatment) isolation is no longer necessary. However, people tend to socially isolate TB patients, even after the treatment is finished and the disease is cured. Many people do not believe that the disease can be cured completely and tend to keep themselves away from TB patients. In the study conducted in Sialkot, TB patients feared rejection by friends and relatives and especially asked that the diagnosis should not be revealed to them. In another study from Mexico City on TB patients, it was seen that 15% of the patients expected rejection by their families after returning home from the hospital (29).

The disparity in the health-seeking behaviour between the urban and rural population was quite apparent in this study, whereby the urban respondents frequented private clinics while the rural respondents, especially males visited Government public hospitals and health centers more frequently. Females were found to be more likely to discuss their medical problems with their husbands or other family members while the males were found to chiefly discuss these issues with their doctors. In fact, it was seen that rural males followed the advice of the doctor, regarding of on when anti-Tuberculosis treatment should be stopped. This health seeking behaviour explains the better knowledge level of the rural males. In the urban area, males and females frequently visit private practitioners. In the slum areas, many of the private practitioners are unqualified health care providers or even if qualified, they do not keep themselves abreast with the latest developments in medicine or public health and therefore are ill-equipped to impart the correct health education to their patients. Since public health programmes like DOTS are not implemented through the private system, many are not even aware of these strategies. Hence, in the urban areas, knowledge of males as well as females was limited.

In the rural areas, most public health strategies are implemented at the Public Health Facilities, where the doctors working are well versed in the public health programmes and provide health education messages to all the patients coming to these health facilities. Since rural males visit these public health facilities, they have a better perception of the disease and are more knowledgeable about various issues pertaining to Tuberculosis. Rural females are not allowed to venture out of the house freely hence their exposure is limited, and not only

do they have a narrow vision of the disease implications, but their understanding and perceptions of the disease are also very limited. They tend to view TB as a “punishment from God” and strongly stigmatize the disease. These observations are further strengthened by the finding that the media including radio, television and newspapers were not an important source of information on Tuberculosis. In case of rural males, (66%), the doctor played an important part in imparting knowledge about Tuberculosis. Hence, contrary to the general belief it was the rural males who were more aware of the disease implications of TB.

The DOTS strategy adopted recently in Pakistan is the recommended mode of Tuberculosis control the world over. It involves supervised administration of TB drugs and it may involve daily visits of the TB patient to a health facility for administration of the drug or supervised drug administration at home in the presence of the health worker. In the urban areas females were more reluctant to visit the health facilities regularly than males. Rural women were not allowed to visit the health facility alone, except when accompanied by their husbands or other family members. As regards health workers, visiting the household to administer medicines, urban respondents were more hesitant to allow outsiders, in the house than rural respondents. However, in both settings it was emphasized that the outsiders should either be a doctor or female health worker and they should come to the house only in the presence of another family member.

In the success of any health intervention strategy, health related beliefs and practices play a very important role. For the ultimate success of DOTS in Pakistan, it is important to ascertain the willingness of the patients to take the TB medicines in the presence of health personnel. Our study outlines the constraints, the females, especially rural females may face in regular visits to the health facility. The urban restraint, not to allow outsiders, in the house should also be kept in perspective. Female health workers whether Lady Health Workers (LHW's) or female community workers could be utilized for the purpose. However this needs to be strengthened by forceful persuasion and motivation



## Conclusion

This study brings forth certain important socio-cultural aspects concerning Tuberculosis in Pakistan. Certain findings bring into sharp focus the gender disparity while others demarcate the urban and rural perception. First and foremost, the overall knowledge about Tuberculosis is lacking in the general population. These include issues varying from predisposing factors of TB, contagious nature of TB, signs and symptoms as well as preventive measures. The knowledge of females, particularly those residing in the rural areas was extremely deficient, which is not surprising in view their phenomenally low literacy rate coupled with the fact that are generally not allowed to leave the house unaccompanied and have less exposure to the outside world. Interestingly the rural males were the most knowledgeable which we can attributed to the health education messages they receive through the public health facilities they frequent. Most preventive health programmes especially the TB Control Programme is implemented through these government health facilities. The urban respondents had more contact with private doctors, who are generally unaware of the TB Control initiatives and have no time to impart health education messages. It was only incase of rural men, that the doctor was an important source of information on Tuberculosis.

The role of media both radio, television and newspapers was limited. Keeping in view, the above observation there is dire need to intensify the health education component of the TB Control Programme. There should be more involvement of the private sector especially in urban areas. More intensified efforts are needed by the media not only to promote health education, but also to help in de-stigmatization of the disease. In the rural areas lady health workers could be utilized more effectively to improve awareness on Tuberculosis especially in rural females.

Secondly, there is critical and dire need to de-stigmatize the disease. This study very strongly points out that TB is perceived to be an extremely dangerous disease. TB patients especially females face social isolation by family and community. Females, whether married or unmarried, face a greater burden of rejection by friends and families. Misconceptions about the contagious nature and curability lead to the idea that TB is a disease to be feared and TB patients need to be socially isolated. A concentrated effort is needed by the media,

doctors and health workers to remove these misconceptions so that the stigma associated with TB can be removed.

The programme managers and planners must bear in mind, the constraints and limitations expressed by most females about either their regular visits to the health facilities or administration of TB medicines under supervision elsewhere. To lower the default rate, alternative means like more effective involvement of the Lady Health Workers and other means need to be considered. The private general practitioners should also be involved in DOTS implementation.

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# ANNEXES

**GENDER PERSPECTIVES IN KNOWLEDGE ATTITUDE AND PRACTICE  
CONCERNING TUBERCLOSIS IN PAKISTAN'S SINDH PROVINCE  
HOPE AND WORLD HEALTH ORGANIZATION (WHO)**

HOUSE HOLD FORM

AREA CODE

HOUSE ID

HOUSE ADDRESS

TOWN

DISTRICT

DATE -- \ \_ -- \ \_ --

NAME OF THE HEAD OF THE FAMILY

SEX

MALE

FEMALE

INTERVIEWER NAME

INTERVIEWER ID

INTERVIEWEE NAME

INTERVIEWEE ID

Q1. How many people are living in this house? (All members living in this house for the last six months family and non-family).

Q2. What is the material of the roof of this house?

1. RCC
2. Asbestos
3. Iron garters
4. Sheet(iron)
5. Hut
6. Other(specify)

Q3. Number of rooms in the house that are under the use of the family?

1. One
2. Two
3. Three
4. Four
5. Greater than four

Q4. What is the monthly income of the family?

1. < 2000
2. 2001-4000
3. 4001-6000
4. 6001-8000
5. 8001-10,000
6. Greater than 10,000
7. Nothing

Q5. Items owned by the family that is in the working condition?

1. Radio/Transistor
2. Television
3. Refrigerator
4. Goat/Sheep
5. Buffalo
6. Motor cycle
7. Car/Truck
8. Others(specify)
9. Nothing



GENDER PERSPECTIVES IN KNOWLEDGE, ATTITUDES AND PRACTICES  
CONCERNING TUBERCULOSIS IN PAKISTAN'S SINDH PROVINCE  
HOPE AND WORLD HEALTH ORGANIZATION (WHO)

INDIVIDUALS FORM

AREA CODE

HOUSE HOLD ID

--	--	--

NAME OF INTERVIEWER:

INTERVIEWER ID:

DATE: \_\_/\_\_/\_\_\_\_

NAME OF INTERVIEWEE:

INTERVIEWEE ID:

SEX:

MALE

FEMALE

AGE IN YEARS:

Q1. What is your marital status?

1. MARRIED
2. UN-MARRIED
3. WIDOWED
4. DIVORCED

Q2. What is your academic qualification?

1. ILLITERATE
2. PRIMARY
3. SECONDARY
4. MIDDLE
5. MATRIC
6. INTERMEDIATE
7. GRADUATE
8. MASTERS
9. PROFESSIONAL
10. ADULT EDUCATION
11. OTHERS

Q3. What is your spouse academic qualification?

1. ILLITERATE
2. PRIMARY
3. SECONDARY
4. MIDDLE
5. MATRIC
6. INTERMEDIATE
7. GRADUATE
8. MASTERS
9. PROFESSIONAL
10. ADULT EDUCATION
11. OTHERS

Q4. What is your occupation?

1. UNEMPLOYED
2. EXECUTIVE
3. PROFESSIONAL
4. TEACHER
5. SALES PERSON
6. DRIVER
7. DAILY WAGES
8. CLERK

9. CHOWKIDAR
10. LABOURER
11. HOUSE WIFE
12. STUDENT
13. COTTAGE INDUSTRY OWNER
14. OTHERS

Q5. What is your monthly income ?

1. 2000
2. 2001 – 4000
3. 4001 – 6000
4. 6001 – 8000
5. 8001 – 10,000
6. Greater than 10,000
7. Nothing

Q6. What is your ethnic group?

1. URDU SPEAKING
2. BALOCHI
3. PUNJABI
4. BENGALI
5. SINDHI
6. PUSHTO
7. BIHARI
8. OTHERS

## **KNOWLEDGE OF THE DISEASE**

S/ N	QUESTION	VERBATIM RESPONSE	S/ N	POINTS TO PROBE	A	B	SCORE
A.	What are the various signs of TB?		1. 2. 3. 4. 5. 6. 7. 8.	Cough Persistent Cough of >3 week Long Term Fever Night Sweats Blood in Sputum Anorexia Weight loss Others (Specify)			
B.	What is the causative factor responsible for Tuberculosis?		1. 2. 3. 4. 5. 6. 7. 8.	Bacteria Virus Parasite Germs Environment Magic / Spell Evil Eye Others (Specify)			
C.	What are the predisposing factors responsible for TB?		1. 2. 3. 4. 5. 6. 7. 8.	Poverty Debility (Under nutrition) Marriage Ch. Illness Over crowding Magic / Evil Eye T. B. in Family Other (Specify)			
D.	How can T. B. be diagnosed?		1. 2. 3. 4. 5. 6.	By x-ray By Sputum Examination By Seeing Blood In Sputum By Blood Test By U/S			

**A= response before probing.**  
**B=response after probing**

					A	B	score
			7.	Urine test Other (Specify)			
E.	How does TB spread?		1. 2. 3. 4. 5. 6. 7.	By droplet infection By Spitting openly By drinking dirty water By sharing Syringes By eating together Sexually transmitted Others (Specify)			
F.	How can you protect yourself / family from T. B.?		1. 2. 3. 4. 5. 6.	BCG vaccination at birth By boiling water By fully treating the patient By keeping utensils of the patients separate. By using prophylactic medicine Other (Specify)			
G.	Who are more prone to develop T. B.?		1. 2. 3. 4. 5. 6.	Men Women Pre-school Children School going children Unmarried Girl Other (Specify)			
H.	What parts of the body T. B. can affect?		1. 2. 3. 4. 5. 6. 7.	Lungs Gastrointestinal tract Reproductive Organs Bones Kidneys Skin Any where			

			8. 9.	Chest Others (Specify)			
I	Who would you consult if you have Tuberculosis?		1. 2. 3. 4. 5.	Medical Doctor Hakim Homeopathic doctor Religious leader Others (Specify)			
<b>A= response before probing.</b> <b>B=response after probing</b>							
J	Where would you go to get treatment for Tuberculosis?		1. 2. 3. 4. 5.	Tertiary hospital Private clinic Government dispensary Special TB clinic Others (Specify)			
K	When should a patient discontinue treatment for TB?		1. 2. 3. 4.	When Symptoms Disappear Till he cannot afford For as long as my doctor advises. Other (Specify)			
L	How long is the usual treatment course?		1. 2. 3. 4. 5. 6. 7. 8.	1 Week 1 Month 1 – 2 Month 2 – 6 Month 6 Month – 9 Month 9 Month – 1 Year 1 Year – 18 Months More then 18 Months			
M.	What can happen if a patient does not take any treatment?		1. 2. 3. 4. 5.	Nothing He / She will be chronically ill He / She would spread it to other family members. Patient can die Other (Specify)			

N	Can a person be Re infected after completing treatment?		1. No 2. Yes, if any of his family is also suffering 3. Yes, if they drink dirty water again 4. Yes, by eating contaminated food 5. If germs of TB attacks again				
O	If a pregnant woman gets TB how would the unborn child affected?		1. No affect 2. Low birth weight 3. Premature 4. Still birth 5. I t would also get TB				
<b>A= response before probing.</b> <b>B=response after probing</b>							
					A	B	score
P	Where do you go for treatment in case of any simple illness?		1. Private Clinic 2. Hakim 3. Homeopathic doctor 4. Government Dispensary 5. Tertiary hospital 6. NGO Clinic 7. Other (Specify)				
Q	With whom you usually travel there?		1. Alone 2. With Neighbor 3. With my husband 4. With Family 5. With my friends 6. Other (Specify)				

R	What is your source of information about TB?		<ol style="list-style-type: none"> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> <li>6.</li> <li>7.</li> <li>8.</li> </ol>	<ul style="list-style-type: none"> <li>Radio / T. V</li> <li>Newspaper / Magazine</li> <li>School</li> <li>Neighbor / Friend</li> <li>Religious Leader</li> <li>Patient of TB</li> <li>Doctor</li> <li>Other (Specify)</li> </ul>			
<p><b>A= response before probing.</b>  <b>B=response after probing</b></p>							



## **ATTITUDES AND PRACTICES**

- Q1. What would be your reaction if you were told that you have been afflicted with Tuberculosis?
- Q2. Who would you discuss it with?
- Q3. If an un-married girl gets TB who all should she share the information with?
- Q4. Who should not be told?
- Q5. Would it hamper her marriage prospects?
- Q6. Should her fiancée or prospective in laws be informed?
- Q7. If a married woman gets TB, What would be the reaction of the spouse?
- Q8. What would be the reaction of her mother in law?
- Q9. What would be the reaction of her father in law?
- Q10. How would her relatives, friends react?
- Q11. What would be the reaction of her colleagues at work?
- Q12. With whom would you discuss your common health problems?
- Q13. How long do you wait after any symptoms to get treatment?
- Q14. How would you react if your husband gets Tuberculosis?
- Q15. Is it possible for you to go and get treatment from a hospital daily, once or twice a week your self?
- Q16. Who would be allowed to visit your home if you were to take medicine under observation?
- Q17. Did some one in your family ever gets Tuberculosis? Who?
- Q18. What was the general attitude towards a patient of Tuberculosis?

Q19. Have you yourself ever suffered from Tuberculosis?

(If the Answer is NO then go-to the last page)

Q20. Did the attitude of your family change in anyway? If yes then in what way?

Q21. Did the attitude of your spouse change in anyway? If yes in what way?

Q22. Were you advised any kind of abstinence from any special food?

Q23. Do you think any kind of abstinence is necessary?

Q24. For how long did you take treatment?

Q25. Why did you stop treatment?

Q26. Did you stop treatment on your own accord?

**TO SCREEN FOR TUBERCULOSIS PATIENT ON CLINICAL GROUND**

Q1. Do you have fever? If yes, Since how long?

Q2. Do you have anorexia? If yes, Since how long?

Q3. Did you ever have blood in your sputum if yes when? Do you still get blood in your sputum?

Q4. Did you have weight loss in past six months?

Q5. Do you have persistent cough for three or more weeks?

Q6. Do you suffer from night sweats? If yes since how long?

Q7. Are any of you family members suffering from Tuberculosis? If yes then who?

Q8. Have you consulted any health care provider for the above complaints?

Q9. Have you had your chest x-ray taken after these complains started?

Q10. Have you had your sputum examined after these complaints?

NOTE

If the answer to any of the question 3,5 or 7 is yes then refer the person to the TB centre.

**GENDER PERSPECTIVES IN KNOWLEDGE ,  
ATTITUDES AND PRACTICES CONCERNING  
TUBERCULOSIS IN PAKISTAN'S SINDH PROVINCE  
HOPE AND WORLD HEALTH ORGANIZATION(WHO)**

**KEY INFORMANT INTERVIEWS  
(COMMUNITY LEADER)**

AREA CODE :

DATE: \_ \_ \ \_ \_ \ \_ \_

INTERVIEWER ID :

INTERVIEWER NAME:

INTERVIEWEE ID:

INTERVIEWEE NAME:

**AGE :**

SEX :

QUALIFICATION :

DESIGNATION :

ADDRESS:

HOME:

OFFICE:

OFFICE TEL:

- Q1. In your opinion who is more prone to Tuberculosis? why?
- Q2. What is the usual reaction of people when they find out that their family member has TB ?
- Q3. What is the reaction when people themselves get Tuberculosis ?
- Q4. Is this reaction different when the patient is a female ? why ?
- Q5. What happens when an unmarried girl gets Tuberculosis? Does this affects her chances of getting married?
- Q6. What is the usual reaction of her parents?
- Q7. What is the usual reaction of her fiancée?
- Q8. What happens if the woman is married?
- Q9. What would be the reaction of her husband?
- Q10. What is the usual reaction of her mother in law?
- Q11. What is the usual reaction of her father in law?
- Q12. How does this disease affect the patient socially? Do People avoid meeting them?
- Q13. Do people usually avoid sharing food with them?
- Q14. Do people usually avoid sharing eating utensils with them?
- Q15. Which type of people usually get Tuberculosis? Which social class?
- Q16. What factors predisposes people to develop TB?
- Q17. Does Magic \ Spell or evil eye play any part?
- Q18. Are there any cultural beliefs regarding causes of Tuberculosis?
- Q19. Are there any cultural beliefs regarding management of Tuberculosis?
- Q20. Where does a patient of Tuberculosis go to get this treatment?
- Q21. How long does it take to completely cure the disease?
- Q22. When should a patient stop treatment?
- Q23. Should the patient stop treatment when he starts feeling well?

Q24. Should a patient take treatment as long as the doctor advises?

Q25. Have you heard of DOTS programme for the treatment of Tuberculosis?

Q26. Would it be possible for a patient to take medication in presence of a responsible person daily/ twice weekly? What in case of women?

Q27. Would it be possible for a patient to go to the nearest health facility and take medicines in presence of any health care provider? What if the patient is female?

Q28: Would the family of a patient allow someone responsible to visit their house to give medications daily? Twice weekly? What if the patient is female?

**GENDER PERSPECTIVES IN KNOWLEDGE, ATTITUDES & PRACTICES**  
**CONCERNING TUBERCULOSIS IN PAKISTAN'S SINDH PROVINCE**  
**HOPE & WORLD HEALTH ORGANIZATION (WHO)**

**FOCUS GROUP (FEMALE)**

AREA CODE:

DATE: -- \ -- \ --

FACILITATOR ID:

FACILITATOR NAME:

REPORTER:

OBSERVER:

**NO. OF PARTICIPANTS:**

- Q. 1. When you hear about Tuberculosis what is the first thought that's comes in your mind?
- Q. 2. What kinds of people are likely to get this disease? Why?
- Q. 3 Are there any factors predisposing to Tuberculosis? What are they?
- Q. 4 If you know some one has Tuberculosis would you stop meeting her/him Socially? Why
- Q. 5 if you know someone has Tuberculosis would you eat with that person? Share Eating utensils?
- Q. 6 How would a mother feel if she come to know that her child has TB? What if the patient is an unmarried girl?

- Q. 7 If a married woman gets TB how would her husband react?
- Q. 8 How would her mother in law feel?
- Q. 9 If an unmarried girl gets TB how would her prospective mother in law feel? Would she accept her anyway?
- Q. 10 How would her father in law feel?
- Q. 11 After how many days do you usually consult any health care provider in case of any illness?
- Q. 12 If you had persistent cough after how many days would you consult any health care provider?
- Q. 13 If you had persistent low grade fever after how many days would you consult any health care provider?
- Q. 14 Are women generally allowed to visit any health care provider with friends?
- Q. 15 What if they are unmarried?
- Q. 16 Where do people, who are suffering from TB usually go for treatment in your area?
- Q. 17. Is the treatment usually completed as advised by the doctor?
- Q. 18 Is there any difference if the patient is a girl?
- Q. 19 If it is advised that the treatment is to be taken in presence of a responsible \ respected person, who would you like to visit to get treatment from?
- Q. 20 If someone comes to your house to give treatment to the patient when would you allow?
- Q. 21 Would women be allowed to visit any health facility daily?



GENDER PERSPECTIVES IN KNOWLEDGE, ATTITUDES AND PRACTICES  
CONCERNING TUBERCULOSIS IN PAKISTAN'S SINDH PROVINCE  
HOPE AND WORLD HEALTH ORGANIZATION (WHO)

**FOCUS GROUP (MALE)**

AREA CODE:

DATE:            -- \ -- \ --

FACILITATOR ID:

NAME:

REPORTER:

OBSERVER:

**NO OF PARTICIPITANTS:**

Q1. When you hear about Tuberculosis what is the first thought that's come to your mind?

Q2. What kind of people have more chances of getting Tuberculosis?

Q3. Who do you think has more chances of getting Tuberculosis? A man or a women and why?

Q4. If you come to know that someone has Tuberculosis how would you react? Would you stop meeting them socially?

Q5. What is the general reaction of people at work if they find out that a colleague has Tuberculosis?

Q6. Would you eat with a patient of Tuberculosis? If not, why?

Q7. How would you react if you come to know that your child has Tuberculosis? What if the patient is an unmarried girl?

Q8. How would you react if your prospective daughter in law has Tuberculosis? Would you let your son marry her any way?

Q9. How would you react if you are informed that your daughter in law is suffering from Tuberculosis?

Q10. What would a man do if his wife gets Tuberculosis? Would he stop eating with her? Stop sleeping with her? Send her to her parents?

Q11. Do men usually accompany their wives when they go to a health care provider?

Q12. Do husbands usually allows their wives to visit a health care facility alone?

Q13. If the treatment provided at nominal charges would you allow your wife to go to a health facility daily to get it?

Q14. If you are asked to allow one person to visit your home daily/twice weekly to provide medicine to your wife would you allow them? Who would you prefer and why?

