

SURVEY REPORT

PROF-1234

**ANTI TUBERCULOSIS TREATMENT;
GENERAL PHYSICIANS APPROACH.****DR. ABDUL JABBAR, MBBS (Dow), M.Phil**Associate Professor
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ABSTRACT... One of the important reasons of failure to control the Tuberculosis in Pakistan is the lack of knowledge of general physicians about the management of tuberculosis. A survey of 60 general physicians was carried out in 2003-2005 about the management of TB. Only 31% general physicians were using almost the correct regimen while 69% were not. Only 10% of the general physicians were going for the Mantoux test (specially in children between 6-12 years) while 90% were diagnosing on the basis of clinical features, blood CP and chest x-ray diagnosing on the basis of clinical features, blood CP and chest x-ray investigations.

It was concluded from this survey that general physicians in private sector are not managing the TB patients accordingly and require extensive refresher courses about the management of Tuberculosis.

INTRODUCTION

Tuberculosis is an infectious systemic chronic granulomatous disease caused by Mycobacterium Tuberculosis¹, which mainly spreads through the respiratory system. The usual site for Tuberculosis is the lungs but other organs may be involved. In the absence of effective treatment, a chronic wasting illness is usual, affecting the economy of developing countries. Tuberculosis remains a public problem in Pakistan².

Tuberculosis remains one of the major cause of morbidity and mortality in Pakistan³. According to WHO figures, the incidence of Tuberculosis in Pakistan in 1995 was 254 / 100,000. This is projected to increase upto 269 / 100,000 over the next ten years⁴. Tuberculosis is a major health hazard. With the advent of HIV (Human

Immunodeficiency Virus), this disease has become a significant health problem all over the world, hence declared a global emergency by WHO in 1993⁵.

The Government of Pakistan adopted the Direct Observation Treatment Short course (DOTS) in 1994. But the progress in DOTS expansion has been very slow. Until 1999, population coverage of DOTS in Pakistan was only 8%.

An effective TB control programme is based upon a country wide case finding and their treatment with chemotherapy⁶.

TREATMENT

The treatment of Tuberculosis is based upon intensive

and prolonged exposure of Mycobacterium Tuberculosis to bacterial antagonists (anti-TB drugs). With effective management, Tuberculosis can be cured in 100% of patients. Using a regimen of three (3) bactericidal drugs, treatment of Tuberculosis can be completed from six (6) to nine (9) months.

The most effective therapeutic regimen combine the two main drugs Isoniazid (INH) and Rifampicin with Pyrazinamide for first two (2) months then Rifampicin and Isoniazid for next four (4) months given on empty stomach early in the morning daily⁷. With these three essential drugs, a final cure rate averaging on 100 % is obtained both in pulmonary and extra-pulmonary cases irrespective of age⁸. In countries like Pakistan where primary bacterial resistance is high⁹, this basic regimen is supplemented for the first two to three months of treatment by a fourth drug Ethambutol or Streptomycin (Table-IA + Table-IB).

Table-IA. Modern drug treatment regimens applicable in national anti-TB programmes	
Total Duration	Treatment Regimens
Six (6) months	a) Rifampicin + Isoniazid (INH) + Pyrazinamide for the first two (2) months then Rifampicin + Isoniazid (INH) for the next four months
	b) Inj. Streptomycin + Rifampicin + Isoniazid (INH) + Pyrazinamide for the first two (2) months then Rifampicin + Isoniazid (INH) for the next four months
	c) Ethambutol + Rifampicin + Isoniazid (INH) + Pyrazinamide for the first two (2) months then Rifampicin + Isoniazid (INH) for the next four months

Table-IB. Modern drug treatment regimens applicable in national anti-TB programmes	
Total Duration	Treatment Regimens
Eight (8) months	a) Inj. Streptomycin + Rifampicin + Isoniazid (INH) + Pyrazinamide for the first two (2) months then Thiacetazone + Isoniazid (INH) for the next six (6) months
	b) Inj. Streptomycin + Rifampicin + Isoniazid (INH) + Pyrazinamide for the first two (2) months then Rifampicin + Isoniazid (INH) for the next two (2) months then Isoniazid (INH) for last four (4) months

In Pakistan, the training and education about Tuberculosis (TB) management is held by Health Directorate which is under control of Health Department. They train only the MBBS doctors who are in Public Sector while less than 35-40 % of our population is attending the public sector health care delivery facilities and rest of the population attend private clinics. In this survey we will see how the General Physician in private sector manage the TB{ Tuberculosis } patients.

MATERIAL & METHODS

This study investigated the approach of the General Physicians (GPs) in the management of Tuberculosis at six different cities of Balochistan (Quetta, Pishin, Muslim Bagh, Zhob, Loralai and Killa Saifullah). Sixty (60) General Physicians with different qualifications (30 MBBS, 20 Quacks, 8 Hakeems and 2 Homeopaths) were randomly selected and were requested to complete a questionnaire. The selected criteria for General Physicians were :

- 1) Minimum experience of ten (10) years in practice.
- 2) Average daily number of patients not below fifteen (15).

RESULTS

Completed questionnaire's revealed that 50 % of the physicians were within the age group of 40-50 years. The mean experience of General Physicians in Practice was ten (10) years. The average of (TB) Tuberculosis patients were six (6) per months both new and old to every General Physician.

All the General Physicians were using more than one method of diagnosis. 90% were starting the anti-TB treatment on the basis of clinical features, complete blood picture (Blood CP) and Chest X-Rays. Only 10 % GPs were going for Mantoux Test, especially in Children.

Only 31 % of the General Physicians in our survey were using the correct short term chemotherapy for TB (Tuberculosis), while 69% were using different short and long term regimens (Table-II) with different combinations.

Duration	Treatment Regimen	%age of GPs using drugs
6-9 months	Inj. Streptomycin + Rifampicin + Isoniazid (INH) + Ethambutol +	31%
3-12 months	Rifampicin + Isoniazid (INH) + Ethambutol + Pyrazinamide +	46%
5-12 months	Rifampicin + Isoniazid (INH) + Ethambutol + For two (2) to three (3) months then Rifampicin + Isoniazid (INH) for three (3) to nine (9) months	35%

DISCUSSION

Tuberculosis remains a serious challenge for developing countries, like Pakistan. Major problems encountered in Pakistan are late or improper diagnosis, prescription of

inadequate treatment regimen, poor supervision leading to irregular intake of drugs and poor follow up. The reason behind this alarming situation in Pakistan has been lack of proper TB control programme.

This survey was the first of this kind in these cities of Balochistan. It was conducted to see the knowledge of General Physicians in the management of Tuberculosis (TB). Our survey result show that 69 % of the General Physicians were not aware about the current trends in Tuberculosis (TB) management. The survey also reveals that most of the General Physicians were changing the anti-TB regimens if there was no significant improvement in the clinical features and this may be the cause of resistance to anti-TB drugs. Also all the Quacks, Hakeems and Homeopaths were using the different regimens without any knowledge of anti-TB drugs.

CONCLUSION

This survey indicates that our General Physicians (GPs) are not managing the TB patients accordingly and are starting treatment on only clinical features (cough, low grade fever and loss of weight) and Blood Picture (low Haemoglobin, raised ESR, increased number of Lymphocytes) which are not the specific tests.

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