

# Characterization of adverse effects and its associations in the patient medicated with anti-tub



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## Biography

Priyatam khadka is a young, ebullient laboratory scientist; passionate on clinical microbiology, cell biology and cancer cell research; looking for a PhD. opportunity in the relevant topics of tropical and infectious disease, cancer cell and immune-therapy. Academically, he completed his Postgraduate in Medical Microbiology with a sound academic background. Currently, has been working as Medical Laboratory Professional in Tribhuvan University Teaching Hospital, Institute of Medicine, and Nepal for last 6 years and extra 3 yrs on other Health research institutes.

## Abstract

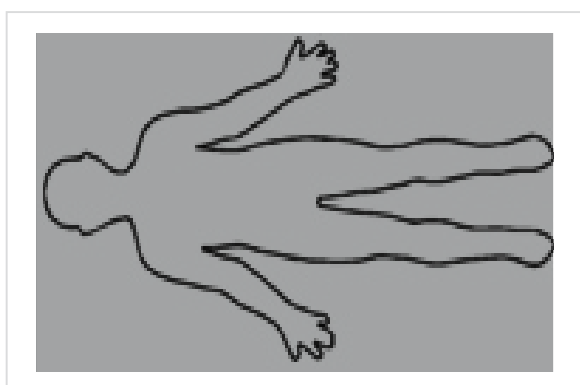
**Background:** Adverse effects from long-term therapeutic intervention in tuberculosis is obvious; however, were taken nonchalantly due to the only therapeutic alternative.

**Objective:** The objective of this study was to characterize the adverse effects and its associations in the patient medicated with anti-tubercular drugs.

**Methods:** A longitudinal prospective study was conducted among the patient medicated with anti-tubercular drugs. As per the guideline of Nepal's National tuberculosis control programme (NTP), Nepal, the treatment category was selected, fixed-dose-regimen was calculated, and treatment outcome was affirmed. Patients' demographics and other clinical details were extracted from the repository files. Upon a consecutive follow-up, observed adverse effects were noted and multivariate logistic analysis against independent factors was done for elucidating any association.

**Result:** Of 177 cases enrolled, 138(77.9%) reported at least two adverse effects. In our multivariate logistic analysis: female, abnormal body mass index (BMI) i.e. underweight and overweight cases, patients' behaviours i.e. smoking/drinking or both, clinical diagnosed cases and intensive treatment phase were independently associated with adverse side effects. Loss of appetite (85.4%) was the commonest while dermatologic manifestations (1.2%) and severe weight-loss (1.2%) were the least observed side-effects among the patient medicated with anti-tubercular drugs. Absolute drug-induced-toxicity was observed in treatment failure or MDR (multi-drug-resistant) subjects.

**Conclusion:** Adverse effects from anti-tubercular therapy are associated with patients' demographics variables. Symptomatic treatment, regular follow-up after implicated therapy, and therapeutic-discontinuation may be required for successful outcomes.



Patient's Demographics	Adverse effect		Total (%)	Odds ratio	95%CI	P value
	Yes(n%)	No(n%)				
Sex						
Male	71(71.7)	28(28.3)	99(55.9)	0.3	0.12-0.88	0.03
Female	67(85.9)	11(14.1)	78(44.1)			
Age group						
<20 years	28(73.7)	10(26.3)	38(21.5)	0.8	0.25-2.7	0.76
20-39 years	72(80.9)	17(19.1)	89(50.3)	1.1	0.38-3.01	0.80
>40 years	38(76.0)	12(24)	50(28.2)	—	—	—
Mean(SD): 33.48(15.80)						
BMI(Kg/m <sup>2</sup> )						
Under weight	87(87.9)	12(12.1)	99(55.9)	1.8	0.72-4.47	0.20
Normal	7(30.4)	16(69.6)	23(13)	0.1	0.03-0.34	<0.005
Overweight	44(80)	11(20)	55(31.1)	—	—	—
Patient's behaviour						
None	115(74.2)	40(25.8)	155(87.5)	0.1	0.01-0.95	0.04
Smoker/alcoholics/both	23(95.8)	1(4.2)	24(12.5)			
Underlying diseases						
HIV	4(66.7)	2(33.3)	6(3.4)	0.5	0.09-3.12	0.40
Diabeties	6(85.7)	1(14.3)	7(4.0)	1.6	0.19-14.13	0.65
Cancer	1(50)	1(50)	2(1.1)	0.3	0.017-4.49	0.36
CKD	3(75)	1(25)	4(2.3)	0.8	0.82-0.083	0.87
Unknown	124(78.5)	34(21.5)	158(89.3)	—	—	—
Type of diagnosis						
Bacteriological con- firmed cases	56(70.0)	24(30)	80(45.2)	0.4	0.20-0.89	0.02
Clinical diagnosed cases	82(84.5)	15(15.5)	97(54.8)			
Type of TB						
PTB	59(72.8)	22(27.2)	81(45.8)	0.6	0.28-1.18	0.13
EPTB	79(82.3)	17(17.7)	96(54.2)			
Treatment category						
CAT(I)	121(77.6)	35(22.4)	156(88.1)	0.8	0.25-2.5	0.70
CAT(II)	17(81.0)	4(19)	21(11.9)			
Treatment phase						
Intensive phase	133	44	177(100)	103.9	40.1-269.4	<0.005
Contuination phase	5	172	177(100)			