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SUPPLEMENTARY MATERIAL

Prescription patterns and drug utilization in respiratory tract infections: implications for antimicrobial stewardship at a tertiary care teaching hospital

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Supplementary Table 1. Characteristics of patients.

Sl.no	Categories	Number of subjects N (%)
1.	Gender	
	Male	141 (70.50)
	Female	59 (29.50)
2.	Age in years	
	18-24	17 (8.50)
	25-39	42 (21)
	40-54	41 (20.50)
	55-69	70 (35)
	70-84	26 (13)
	85-99	4 (2)
3.	Residence	
	Urban	76 (38)
	Rural	124 (62)
4.	Qualification	
	Degree	23 (11.50)
	Diploma	3 (1.50)
	Intermediate	23 (11.50)
	Schooling	53 (26.50)
	Twelfth	17 (8.50)
	Uneducated	82 (40.50)
5.	Occupation	
	Farmer	54 (27)
	Construction Labour	20 (10)
	Industry worker	22 (11)
	Housewife	19 (9.50)
	Others occupations	85 (42)
6.	Comorbidities	
	Present	120 (60)
	Absent	80 (40)
7.	Income	
	Above poverty line	25 (12.50)
	Below poverty line	125 (87.50)
8.	Employment Status	
	Poorly employed	129 (64.50)
	Unemployed	37 (18.50)
	Well employed	34 (17)
9.	Diagnosis	
	Lower respiratory tract infection	181 (90.50)
	Upper respiratory tract infection	19 (9.50)
10.	Length of hospital stay	
	Less than 5 days	73 (36.50)
	More than 5 days	127 (63.50)

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Supplementary Table 2. WHO core prescribing indicator.

Sl.no	WHO parameters	Frequency/percentage
1.	The average number of drugs per prescription	6
2.	Number of drugs prescribed by generic names	1125
3.	Percentage of drugs prescribed with an injection	48 %
4.	Percentage of prescriptions with an antibiotic prescribed per patient per prescription	100%
5.	Total number of antibiotics identified in the study	765
6.	Fixed Dose Combinations	22 (1.95)
7.	Percentage prescribed from National List of Essential Medicines or formulary	715 (63.63)

Supplementary Table 3. Distribution pattern of antibiotics.

Pattern of therapy	Number of patients	Percentage
Monotherapy	09	4.50
Dual therapy	66	33
Triple therapy	46	23
Poly therapy	79	39.50

Supplementary Table 4. Distribution of oral and parenteral antibiotics.

Route of administration	Frequency	Percentage
Oral	457	52
Parenteral	423	48

Supplementary Table 5. Distribution of bronchodilators, inhalers, and cough syrups.

Categories	Frequency	Percentage
Bronchodilators		
Asthalin	51	19.03
Doulin	41	15.30
Budesonide	71	26.49
Asthalin + Budesonide	24	8.96
Duolin + Budesonide	8	2.99
Other Combinations	2	0.75
No Bronchodilators	71	26.49
Cough Syrups		
Ambroxol	15	7.43
Salbutamol	12	5.94
Ascoryl	30	14.8
Unknown CS	15	7.43
Brozedex	14	6.93
Gryilintus	9	4.46
No Cough Syrup	103	50.9
Other Cough Syrups	4	1.98
Inhalers		
Forocort Inhaler	22	22.45
Seroflow Rotahaler	5	5.10
Oxygen Inhalation	71	72.45

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Supplementary Table 6. Frequency of oral and parenteral antibiotics.

Frequency	Oral administration	Parenteral administration
1	2.50%	35.50%
2	23.50%	26.50%
3	33.50%	20.50%
4	27.00%	9.50%
5	11.00%	3.50%
6	2.00%	1.00%
7	0.50%	3.50%

Supplementary Table 7. Drugs used in respiratory tract infection management.

Drugs used in RTI	Dose	Frequency	Percentage
Ceftriaxone	1g	95	12.68
Vancomycin	1g	2	0.27
Meropenem	1g	28	3.74
Levofloxacin	500mg	74	9.88
Linezolid	600mg	2	0.27
Theophylline	200mg	75	0.01
Hydrocortisone	100mg	41	5.47
Metronidazole	500mg	28	3.74
Piperacillin/tazobactam	4.5g	49	6.54
Oseltamivir	75mg	42	5.61
Amikacin	100mg	2	0.27
Dexamethasone	200mg	5	0.67
Fluconazole	150mg	6	0.80
Cefotaxime	500mg	1	0.13
Cefuroxime	500mg	5	0.67
Cefpodoxime	500mg	2	0.27
Ciprofloxacin	200mg	7	0.93
Rifampicin	450mg	3	0.40
Rifaximin	550mg	2	0.27
Azithromycin	500mg	89	11.88
Clindamycin	300mg	2	0.27
Cefixime	1g	29	3.87
Montelukast lc	10mg	35	4.67
Doxycycline	100mg	48	6.41
Amoxicillin/potassium clavulanic acid	1.2g	30	4.10
Prednisolone	100mg	19	2.54
ATT for TB	-	16	2.14
Acebrophylline	100mg	4	0.53
Ethambutol	200mg	3	0.40
ART (Tenofovir + Emtricitabine + Efavirenz)	300mg+200mg+600mg	1	0.13
Etophylline	100mg	1	0.13
Levosalbutamol	2mg	1	0.13
Albendazole	400mg	1	0.13

Supplementary Table 8. Class of drugs used in respiratory tract infection management.

Class of Drugs used in RTI	Frequency	Percentage
Cephalosporins	102	20.69
Beta-lactamase inhibitors	43	8.72
Macrolides	64	12.98
Tetracyclines	36	7.30
Carbapenem	22	4.46
Nitroimidazole	3	0.61
Lacosamide	2	0.41
Aminoglycoside	3	0.61
Mycolic acid synthesis	4	0.81
RNA polymerase inhibitors	16	3.25
Penicillin's	15	3.04
Corticosteroids	7	1.42
Bronchodilators	18	3.65
Leukotriene receptor antagonists	2	0.41
Glycopeptides	1	0.20
Mucolytics	121	24.54
Anti-retroviral drug	2	0.41
Fluoroquinolones	32	6.49