Supplementary Material

Table S1. Frequency of uropathogens isolated from patients with UTI

Name of the Isolate	No of the Isolates
E. coli	544
Klebsiella spp.	143
Enterococcus spp.	78
Candida spp.	58
Enterobacter spp.	34
Pseudomonas spp.	9
Proteus spp.	8
Staphylococcus aureus	7
Acinetobacter spp.	5
Acetobacter spp.	2
Citrobacter spp.	1
Lactobacillus spp.	1
Morganella morganii	1
Polymicrobial Growth	110
Total	**1001**

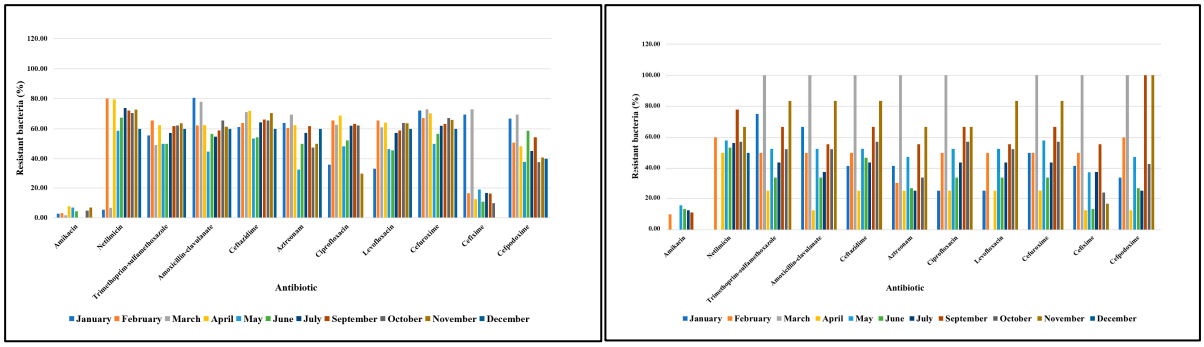
Table S2. Antibiotic resistance profile of bacteria isolated from patients positive for UTI. The table shows the number and percentage of antibiotic-resistant bacterial isolates for each antibiotic. Bacterial isolates include- Gram-negative*: E. coli*, *Klebsiella* spp., *Enterobacter* spp., *Pseudomonas* spp., *Proteus* spp., *Acinetobacter* spp., *Acetobacter* spp., *Citrobacter* spp., *Morganella morganii* and Gram-positive*: Enterococcus* spp., *Staphylococcus aureus*, and *Lactobacillus* spp.

Antibiotic	Number of resistant isolates (%)											
	Gram –ve Bacteria									Gram +ve Bacteria		
	E. coli (*n*=544)	*Klebsiella* spp. (*n*=143)	*Enterobacter* spp. (*n*=34)	*Pseudomonas* spp. (*n*=9)	*Proteus* spp. (*n*=8)	*Acinetobacter* spp. (*n*=5)	*Acetobacter* spp.(*n*=2)	*Citrobacter* spp. (*n*=1)	*Morganella morganii* (*n*=1)	*Enterococcus* spp. (*n*=78)	*Staphylococcus aureus* (*n*=7)	*Lactobacillus* spp.(*n*=1)
Cefuroxime	352 (64.71%)	67 (46.85%)	17 (50.00%)	9 (100%)	3 (37.50%)	2 (40.00%)	1 (50.00%)	0 (0%)	1 (100%)	47 (60.26%)	0 (0%)	1 (100%)
Ceftazidime	351 (64.71%)	67 (46.85%)	19 (55.88%)	9 (100%)	3 (37.50%)	2 (40.00%)	1 (50.00%)	1 (100%)	0 (0%)	58 (74.36%)	ND	1 (100%)
Amoxicillin-clavulanate	338 (62.13%)	64 (44.76%)	16 (47.06%)	2 (22.22%)	1 (12.50%)	2 (40.00%)	1 (50.00%)	1 (100%)	0 (0%)	54 (69.23%)	ND	1 (100%)
Netilmicin	329 (60.48%)	70 (48.95%)	25 (73.53%)	7 (77.78%)	3 (37.50%)	2 (40.00%)	1 (50.00%)	1 (100%)	1 (100%)	37 (47.44%)	0 (0%)	1 (100%)
Trimethoprim-Sulfamethoxazole	316 (58.09%)	69 (48.25%)	15 (44.12%)	2 (22.22%)	3 (37.50%)	1 (20%)	1 (50.00%)	1 (100%)	0 (0%)	70 (89.74%)	0 (0%)	1 (100%)
Levofloxacin	312 (57.35%)	58 (40.56%)	13 (38.24%)	7 (77.78%)	1 (12.50%)	1 (20%)	1 (50.00%)	0 (0%)	0 (0%)	50 (64.10%)	ND	1 (100%)
Ciprofloxacin	306 (56.25%)	63 (44.06%)	16 (47.06%)	7 (77.78%)	1 (12.50%)	1 (20%)	1 (50.00%)	0 (0%)	0 (0%)	44 (56.41%)	ND	1 (100%)
Aztreonam	303 (55.70%)	47 (32.87%)	10 (29.41%)	4 (44.44%)	2 (25.00%)	2 (40.00%)	1 (50.00%)	1 (100%)	1 (100%)	41 (52.56%)	2 (28.57%)	0 (0%)
Cefpodoxime	275 (50.55%)	55 (38.46%)	9 (26.47%)	8 (88.89%)	4 (50.00%)	2 (40.00%)	2 (100%)	1 (100%)	1 (100%)	27 (34.62%)	2 (28.57%)	0 (0%)
Cefixime	126 (23.16%)	42 (29.37%)	17 (50.00%)	8 (88.89%)	7 (87.50%)	2 (40.00%)	1 (50.00%)	1 (100%)	0 (0%)	11 (14.10%)	0 (0%)	1 (100%)
Amikacin	21 (3.86%)	10 (6.99)	5 (14.71%)	4 (44.44%)	0 (0%)	1 (20%)	1 (50.00%)	1 (100%)	0 (0%)	59 (75.64%)	ND	0 (0%)

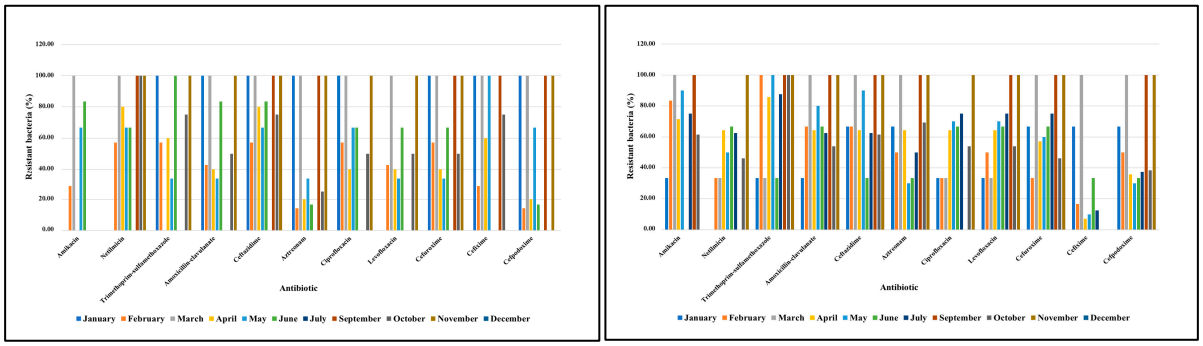
[1] ND=Resistance profiles of *Staphylococcus aureus* for ceftazidime, amoxicillin-clavulanate, levofloxacin, ciprofloxacin and amikacin were not determined.

Table S3. Trends in resistance rates of *E. coli*, *Klebsiella* spp., *Enterobacter* spp. and *Enterococcus* spp. over time (covering all months of 2018 except August).

Bacteria	Months	Total no. of resistant bacteria isolated each month	Resistant bacteria to Antibiotic																			
			Amikacin		Netilmicin		Trimethoprim-sulfamethoxazole		Amoxicillin-clavulanate		Ceftazidime		Aztreonam		Ciprofloxacin		Levofloxacin		Cefuroxime		Cefixime		Cefpodoxime	
			Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
E. coli	January	36	1	2.78	2	5.56	20	55.56	29	80.56	22	61.11	23	63.89	13	36.11	12	33.33	26	72.22	25	69.44	24	66.67
	February	61	2	3.28	49	80.33	40	65.57	38	62.30	39	63.93	37	60.66	40	65.57	40	65.57	41	67.21	10	16.39	31	50.82
	March	59	1	1.69	4	6.78	29	49.15	46	77.97	42	71.19	41	69.49	37	62.71	36	61.02	43	72.88	43	72.88	41	69.49
	April	64	5	7.81	51	79.69	40	62.50	40	62.50	46	71.88	40	62.50	44	68.75	41	64.06	45	70.31	8	12.50	31	48.44
	May	58	4	6.90	34	58.62	29	50.00	26	44.83	31	53.45	19	32.76	28	48.28	27	46.55	29	50.00	11	18.97	22	37.93
	June	46	2	4.35	31	67.39	23	50.00	26	56.52	25	54.35	23	50.00	24	52.17	21	45.65	26	56.52	5	10.87	27	58.70
	July	42	0	0.00	31	73.81	24	57.14	23	54.76	27	64.29	24	57.14	26	61.90	24	57.14	26	61.90	7	16.67	19	45.24
	September	68	0	0.00	49	72.06	42	61.76	40	58.82	45	66.18	42	61.76	43	63.24	40	58.82	43	63.24	11	16.18	37	54.41
	October	61	3	4.92	43	70.49	38	62.30	40	65.57	40	65.57	29	47.54	38	62.30	39	63.93	41	67.21	6	9.84	23	37.70
	November	44	3	6.82	32	72.73	28	63.64	27	61.36	31	70.45	22	50.00	13	29.55	28	63.64	29	65.91	0	0.00	18	40.91
	December	5	0	0.00	3	60.00	3	60.00	3	60.00	3	60.00	3	60.00	0	0.00	3	60.00	3	60.00	0	0.00	2	40.00
Klebsiella spp.	January	12	0	0.00	0	0.00	9	75.00	8	66.67	5	41.67	5	41.67	3	25.00	3	25.00	6	50.00	5	41.67	4	33.33
	February	10	1	10.00	6	60.00	5	50.00	5	50.00	5	50.00	3	30.00	5	50.00	5	50.00	5	50.00	5	50.00	6	60.00
	March	3	0	0.00	0	0.00	3	100.00	3	100.00	3	100.00	3	100.00	3	100.00	0	0.00	3	100.00	3	100.00	3	100.00
	April	8	0	0.00	4	50.00	2	25.00	1	12.50	2	25.00	2	25.00	2	25.00	2	25.00	2	25.00	1	12.50	1	12.50
	May	19	3	15.79	11	57.89	10	52.63	10	52.63	10	52.63	9	47.37	10	52.63	10	52.63	11	57.89	7	36.84	9	47.37
	June	15	2	13.33	8	53.33	5	33.33	5	33.33	7	46.67	4	26.67	5	33.33	5	33.33	5	33.33	2	13.33	4	26.67
	July	16	2	12.50	9	56.25	7	43.75	6	37.50	7	43.75	4	25.00	7	43.75	7	43.75	7	43.75	6	37.50	4	25.00
	September	9	1	11.11	7	77.78	6	66.67	5	55.56	6	66.67	5	55.56	6	66.67	5	55.56	6	66.67	5	55.56	9	100.00
	October	21	0	0.00	12	57.14	11	52.38	11	52.38	12	57.14	7	33.33	12	57.14	11	52.38	12	57.14	5	23.81	9	42.86
	November	6	0	0.00	4	66.67	5	83.33	5	83.33	5	83.33	4	66.67	4	66.67	5	83.33	5	83.33	1	16.67	6	100.00
	December	2	0	0.00	1	50.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Enterobacter spp.	January	1	0	0.00	0	0.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	0	0.00	1	100.00	1	100.00	1	100.00
	February	7	2	28.57	4	57.14	4	57.14	3	42.86	4	57.14	1	14.29	4	57.14	3	42.86	4	57.14	2	28.57	1	14.29
	March	1	1	100.00	1	100.00	0	0.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00
	April	5	0	0.00	4	80.00	3	60.00	2	40.00	4	80.00	1	20.00	2	40.00	2	40.00	2	40.00	3	60.00	1	20.00
	May	3	2	66.67	2	66.67	1	33.33	1	33.33	2	66.67	1	33.33	2	66.67	1	33.33	1	33.33	3	100.00	2	66.67
	June	6	5	83.33	4	66.67	6	100.00	5	83.33	5	83.33	1	16.67	4	66.67	4	66.67	4	66.67	0	0.00	1	16.67
	July	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
	September	1	0	0.00	1	100.00	0	0.00	0	0.00	1	100.00	1	100.00	0	0.00	0	0.00	1	100.00	1	100.00	1	100.00
	October	4	0	0.00	4	100.00	3	75.00	2	50.00	3	75.00	1	25.00	2	50.00	2	50.00	2	50.00	3	75.00	0	0.00
	November	1	0	0.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	0	0.00	1	100.00
	December	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Enterococcus spp.	January	3	1	33.33	0	0.00	1	33.33	1	33.33	2	66.67	2	66.67	1	33.33	1	33.33	2	66.67	2	66.67	2	66.67
	February	6	5	83.33	2	33.33	6	100.00	4	66.67	4	66.67	3	50.00	2	33.33	3	50.00	2	33.33	1	16.67	3	50.00
	March	3	3	100.00	1	33.33	1	33.33	3	100.00	3	100.00	3	100.00	1	33.33	1	33.33	3	100.00	3	100.00	3	100.00
	April	14	10	71.43	9	64.29	12	85.71	9	64.29	9	64.29	9	64.29	9	64.29	9	64.29	8	57.14	1	7.14	5	35.71
	May	10	9	90.00	5	50.00	10	100.00	8	80.00	9	90.00	3	30.00	7	70.00	6	60.00	6	60.00	1	10.00	3	30.00
	June	3	0	0.00	2	66.67	1	33.33	2	66.67	1	33.33	1	33.33	2	66.67	2	66.67	2	66.67	1	33.33	1	33.33
	July	8	6	75.00	5	62.50	7	87.50	5	62.50	5	62.50	4	50.00	6	75.00	6	75.00	6	75.00	1	12.50	3	37.50
	September	1	1	100.00	0	0.00	1	100.00	1	100.00	1	100.00	1	100.00	0	0.00	1	100.00	1	100.00	0	0.00	1	100.00
	October	13	8	61.54	6	46.15	13	100.00	7	53.85	8	61.54	9	69.23	7	53.85	7	53.85	6	46.15	0	0.00	5	38.46
	November	1	0	0.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00	0	0.00	1	100.00
	December	1	1	100.00	0	0.00	1	100.00	1	100.00	1	100.00	0	0.00	0	0.00	1	100.00	1	100.00	0	0.00	0	0.00



(A) **(B)**



(C) **(D)**

Figure S1. Graphical representation of trends in resistance rates of A) *E. coli* ;(B) *Klebsiella* spp.; (C) *Enterobacter* spp.; (D) *Enterococcus* spp. over time (covering all months of 2018 except August).