

Table S1: Antimicrobial susceptibility patterns of Gram-negative bacterial isolates from eye discharge at University of Gondar referral hospital laboratory (January 2009-January 2019), Gondar, Northwest, Ethiopia.

Isolates		Antimicrobials. N (%)										
		AMP	AMX	CRO	CAF	CIP	E	CN	NOR	NA	SXT	TE
K.sp	T	8	7	10	12	12	1	15	3	2	13	4
	R	8(100)	7(100)	6(60)	8(66.7)	2(16.7)	0(0)	11(73.3)	2(66.7)	1(50)	11(84.6)	2(50)
<i>E. coli</i>	T	9	7	8	8	9	0	9	4	1	9	11
	R	7(77.8)	5(71.4)	2(25)	3(37.5)	3(33.3)	0(0)	5(55.6)	1(25)	0(0)	7(77.8)	8(72.7)
NLF	T	4	2	4	4	3	0	3	2	1	2	3
	R	3(75)	2(100)	1(25)	1(25)	1(33.3)	0(0)	1(33.3)	0(0)	1(100)	0(0)	1(33.3)
Othe	T	2	2	1	3	3	0	2	0	0	0	2
	R	2(100)	2(100)	0(0)	2(66.7)	0(0)	0(0)	1(50)	0(0)	0(0)	0(0)	2(100)
Cit	T	2	0	3	2	3	0	3	1	0	3	2
	R	2(100)	0(0)	1(33.3)	1(50)	0(0)	0(0)	2(66.7)	0(0)	0(0)	2(66.7)	1(50)
prot	T	1	1	1	1	1	0	2	2	1	1	0
	R	1(100)	1(100)	0(0)	0(0)	1(100)	0(0)	0(0)	0(0)	0(0)	0(0)	0(0)

Note: *K spp*= *Klebsiella* species *E.col* = *E. coli*, *Prote.spp*= *proteus* species, NLF= non-lactose fermenter Gram-negative rods, *Cit*=*Citrobacter*, *othe*= other Gram-negative rods,

AMP= Ampicillin, AMX= Amoxicillin, CRO=Ceftriaxone, CAF=Chloramphenicol, CIP=Ciprofloxacin, E=Erythromycin, CN= Gentamycin, NOR= Norfloxacin, NA=Nalidixic acid, SXT=Cotrimoxazole, TE= Tetracycline

Table S2: Antimicrobial susceptibility patterns of Gram-positive bacterial isolates from eye discharge at University of Gondar referral hospital (January 2009-January 2019), Gondar,

Isolates		AMP	AMX	CRO	CAF	CIP	E	CN	NOR	PG	SXT	OXA	TE
<i>S. au</i>	T	13	12	18	21	24	40	22	18	26	25	9	18
	R	13(100)		3(16.7)	9(42.9)	7(29.2)	22(55)	7(31.8)	2(11.1)	21(80.8)	18(72)	6(66.7)	14(77.8)
CNS	T	6	8	13	17	9	14	9	8	9	14	3	8
	R	3(50)	6(75)	5(38.5)	12(70.6)	2(22.2)	8(57.1)	6(66.7)	2(25)	8(88.9)	13(92.9)	2(66.7)	7(87.5)
Oth.st	T	6	2	12	9	9	15	9	7	7	5	1	7
	R	2(33.3)	2(100)	1(8.3)	2(22.2)	0(0)	5(33.3)	5(55.6)	4(57.1)	6(85.7)	5(100)	0(0)	7(100)
<i>S. pyo.</i>	T	4	6	5	5	6	7	6	3	4	3	0	4
	R	2(50)	3(50)	2(40)	2(40)	2(33.3)	2(28.6)	3(50)	1(33.3)	0(0)	2(66.7)	0(0)	4(100)
<i>S. pn</i>	T	3	0	1	2	1	3	2	1	4	3	1	4
	R	1(33.3)	0(0)	0(0)	1(50)	0(0)	0(0)	2(100)	0(0)	1(25)	3(100)	0(0)	2(50)

Northwest, Ethiopia.

Note: *S.au*= *S. aureus*, *CNS*= *Coagulase – Negative Staphylococcus*, *Oth. St*= *Other streptococcus*, *S.pyo*= *S. pyogenes*, *S.pn*=*S. pneumoniae*

AMP= Ampicillin, AMX= Amoxicillin, CRO=Ceftriaxone, CAF=Chloramphenicol, CIP=Ciprofloxacin, E=Erythromycin, CN= Gentamycin, NOR= Norfloxacin, SXT=Cotrimoxazole, TE= Tetracycline, P= penicillin, OXA=oxacillin

Table S3: Multidrug Resistance Patterns of Bacteria Isolates from eye discharge at University of Gondar referral hospital laboratory (January 2009-January 2019), Gondar, Northwest, Ethiopia

Bacterial isolates	R0	R1	R2	R3	R4	R5	R6	Total	MDR
Gram-negative									
<i>Klebsiella</i> (N=18)	1(5.6)	4(22.2)	4(22.2)	3(16.7)	3(16.7)	1(5.6)	2(11.1)	18(100)	9(50)
<i>E. coli</i> (N=11)	0(0)	1(9.1)	4(36.4)	3(27.3)	0(0)	1(5.6)	2(18.2)	11(100)	6(54.5)
NLFGNR (N=5)	1(20)	1(20)	2(40)	1(20)	0(0)	0(0)	0(0)	5(100)	1(20)
<i>Citrobacter</i> (N=3)	0(0)	1(33.3)	1(33.3)	0(0)	1(33.3)	0(0)	0(0)	3(100)	1(33.3)
Others (N=3)	0(0)	0(0)	2(66.7)	1(33.3)	0(0)	0(0)	0(0)	3(100)	1(33.3)
<i>proteus</i> (N=2)	1(50)	1(50)	0(0)	0(0)	0(0)	0(0)	0(0)	2(100)	0(0)
Gram-posit.bacteria									
<i>S. aureus</i> (N=45)	6(13.3)	4(8.9)	14(31.1)	8(17.8)	10(22.2)	2(4.4)	1(2.2)	45(100)	21 (46.7)
CoNS (N=17)	1(5.9)	0(0)	4(23.5)	2(11.8)	4(23.5)	2(11.8)	4(23.8)	17(100)	12(70.6)
Otherstrept (N=16)	3(18.8)	2(12.5)	3(18.8)	4(25)	2(12.5)	2(12.5)	0(0)	16(100)	8(50)
<i>S. pyogenes</i> (N=8)	1(12.5)	2(25)	2(25)	0(0)	1(12.5)	1(12.5)	1(12.5)	8(100)	3(37.5)
<i>S. pneumoniae</i> (N=5)	0(0)	3(60))	1(20)	0(0)	0(0)	1(20)	0(0)	5(100)	1(20)
Total	14(10.5)	19(14.3)	37(27.8)	22(16.5)	21(15.8)	10(7.5)	10(7.5)	133(100)	63 (47.4)

Key:

R0: No resistance for any class of antimicrobial

R2: Resistance for two class of antimicrobial

R4: Resistance for four class of antimicrobials

R6: Resistance for six class of antimicrobials

R1: Resistance for one class of antimicrobials

R3: Resistance for three class of antimicrobials

R5: Resistance for five class of antimicrobials

R7: Resistance for seven class of antimicrobials

Table S4: Chi-square test for trend applied to bacterial resistance rates to various antimicrobials at University of Gondar comprehensive specialized hospital laboratory (January 2009 – January 2019), Gondar, Northwest, Ethiopia

Antimicrobials	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	X ²	p-value
Ampicillin	80%	60%	100%	100%	62.5%	100%	100%	50%	100%	100%	62.2	P<0.0001
Amoxicillin	45.5%	100%	100%	100%	60%	50%	50%	100%	100%	100%	76.6	P<0.0001
Ceftriaxone	25%	16.7%	100%	0%	50%	0%	0%	100%	28.6%	60%	100.5	P<0.0001
Chloramphenicol	43.5%	36.8%	60%	--	100%	20%	33.3%	83.3%	57.1%	25%	55.8	P<0.0001
Ciprofloxacin	12.5%	0%	50%	0%	0%	--	25%	100%	50%	53.8%	51.8	P < 0.05
Erythromycin	50%	25%	0%	0%	66.7%	0%	40%	100%	77.8%	57.1%	28.7	P =0.373
Gentamycin	55.6%	41.2%	100%	100%	37.5%	0%	33.3%	100%	71.4%	66.7%	48.9	P=0.06
Nalidixic Acid	50%	75%	---	0%	0%	---	----	--	--	--	22.4	P=0.212
Norfloxacin	36.8%	16.7%	50%	0%	33.3%	0%	0%	0%	25%	0%	56.0	P<0.05
Oxacillin	--	--	--	--	--	0%	100%	100%	100%	50%	72	P<0.0001
Cotrimoxazole	66.7%	76.5%	80%	100%	100%	50%	100%	100%	100%	86.7%	58.7	P<0.0001
Tetracycline	66.7%	68.4%	100%	100%	100%	100%	50%	66.7%	50%	100%	72.0	P<0.05