

Table S1. Oligonucleotide primer sequences used for PCR assays.

Target Gene	Primer	Oligonucleotide Sequence (5'→3')	Product Size (bp) [§]	Annealing Temperature (°C)	References
<i>K. pneumoniae</i> 16S-23S ITS*	<i>K. pneumoniae</i> Pf <i>K. pneumoniae</i> Pr1	ATTTGAAGAGGTTGCAAACGAT TTCACCTCTGAAGTTTCTGTGTTC	130	57	[23]
<i>bla</i> _{OXA-1}	OXA-F OXA-R	GGCACCAGATTCAACTTTCAAG GACCCCAAGTTTCCTGTAAGTG	564	61	[33]
<i>bla</i> _{CTX-M1}	CTX-M-1-F CTX-M-1-R	TTAGGAAGTGTGCCGCTGTA CGGTTTTATCCCCACAAC	655		
<i>bla</i> _{SHV}	SHV-F SHV-R	AGCCGCTTGAGCAAATTAAC ATCCCGCAGATAAATCACCAC	713		
<i>bla</i> _{TEM}	TEM-F TEM-R	CATTTCGCTGTCGCCCTTATTC CGTTCATCCATAGTTGCCTGAC	800		
<i>bla</i> _{IMP}	IMP1-F IMP1-R	CATGGTTTGGTGGTTCTTGT ATAATTTGGCGGACTTTGGC	488	53	[34]
<i>bla</i> _{VIM}	VIM-F VIM-R	AGTGGTGAGTATCCGACA ATGAAAGTGCGTGAGAC	280	52	[35]
<i>bla</i> _{NDM1}	NDM-1-F NDM-1-R	GGCGGAATGGCTCATCACGA CGCAACACAGCCTGACTTTC	287	55	[36]
<i>mcr-1</i>	CLR5-F CLR5-R	CGGTCAGTCCGTTTGTTT CTTGCTCGGTCTGTAGGG	309	55	[37]
ERIC consensus	ERIC1R ERIC2	ATGTAAGCTCCTGGGGATTAC AAGTAAGTGACTGGGGTGAGCG	Variable	52	[38]

* ITS, Internal transcribed spacer; [§] bp, base pair.

Table S2. Frequency distribution of *K. pneumoniae* isolates recovered from broiler farms and human workers in the study area.

Farms	Chicken					TC	Cw**
	C	Ce*			Total		
		Water	Food	Litter			
1	2	1	0	1	2	4	1
2	0	0	0	0	0	0	0
3	3	2	1	1	4	7	2/3
4	1	1	0	0	1	2	1
5	1	0	0	1	1	2	0
6	1	0	0	1	1	2	1
7	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0/3
9	0	0	0	0	0	0	0
10	1	0	0	1	1	2	0
Total (%)	9/100	4/20	1/20	5/20	10/60	19/160	5/22
	(9)	(20)	(5)	(25)	(16.7)	(11.9)	(22.7)

C: diseased chicken; Ce: chicken environment samples; TC: total chicken samples.

* Two pooled (a pool of three) samples for each type per farm; ** Cw: stool samples of chicken workers in broilers farms

Table S3. Source associated variations in phenotypic and genetic antibiotic resistance traits of *K. pneumoniae* isolates from chickens and humans in this study.

Variables	Source	Positive	OR	* <i>p</i> -Value	95% CI
Carbapenemase encoding gene	<i>bla</i> _{VIM}	Chicken	1/19 (5.3)	-	-
		Human	12/18 (66.7)	36	0.002
	<i>bla</i> _{NDM}	Chicken	2/19 (10.5)	-	-
		Human	10/18 (55.6)	10.6	0.01
Phenotypic resistance	Imipenem	Chicken	3/19 (15.8)	-	-
		Human	14/18 (77.8)	18.7	0.001
	Gentamicin	Chicken	5/19 (26.3)	-	-
		Human	11/18 (61.1)	4.4	0.04
	Aztreonam	Chicken	4/19 (21.1)	-	-
		Human	10/18 (55.6)	4.7	0.04
	Azithromycin	Chicken	7/19 (36.8)	-	-
		Human	17/18 (94.4)	29.1	0.003

* There was no significant association with regard to other antibiotic resistance genes or tested antimicrobials among the detected isolates. OR: Odds ration; CI: Confidence interval. *p*-value is considered significant at ≤0.05.

References

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