



Figure 1. Distribution of the Microorganism isolates from 88 positive cases

Table 2 shows the *Klebsiella* species and *Pseudomonas aeruginosa* were the most prevalent (36.9% and 16.5% respectively) among the Gram-negative bacilli, followed by *Escherichia coli* (5.8%) and *Proteus* species (2.9%). *Streptococcus pneumoniae* was the most prevalent among Gram-positive cocci (21.3%), followed by *Staphylococcus aureus* and *Streptococcus pyogenes* (11.7% and 4.9% respectively).

Table 2. Distribution of the Bacterial isolates from sputum of patients with RTI

Bacterial species		No. of isolates	%
Gram-negative bacilli	<i>Klebsiella species</i>	38	36.9
	<i>Pseudomonas aeruginosa</i>	17	16.5
	<i>Escherichia coli</i>	6	5.8
	<i>Proteus species</i>	3	2.9
Gram-positive cocci	<i>Streptococcus pneumoniae</i>	22	21.3
	<i>Staphylococcus aureus</i>	12	11.7
	<i>Streptococcus pyogenes</i>	5	4.9

The drug sensitivity to bacterial pathogen isolates from patients with RTIs:

High rates of resistance to Amoxicillin and Cephalothin was demonstrated by all bacteria, whereas most isolates were found to be highly sensitive to Amikacin, Ciprofloxacin and Tobramycin. *Klebsiella* species showed high resistance to most of antibiotic agents except Amikacin, Ciprofloxacin and Tobramycin were the most potent activity against this strain.

Streptococcus pneumoniae, showed moderate to high resistance against Cephalothin, Tetracycline and Erythromycin, while good effect to other antibiotic agents, which were used in this study.

Pseudomonas aeruginosa, *Streptococcus pyogenes* and *Escherichia coli* isolates exhibited strong resistance to most tested antibiotic types except Amikacin, Ciprofloxacin and Tobramycin revealed good efficacy.

Most of isolates showed good susceptibility to Cefotaxim and Gentamicin except *Klebsiella* species (18.4%) and *Escherichia coli* (33.3%) which were poor efficacy to these antibiotics agents. Majority of isolates were highly resistance to Tetracycline and Erythromycin except *Proteus* species and *Staphylococcus aureus* showed fully sensitive to these antibiotic agents. These results, as presented in figures (2-8).