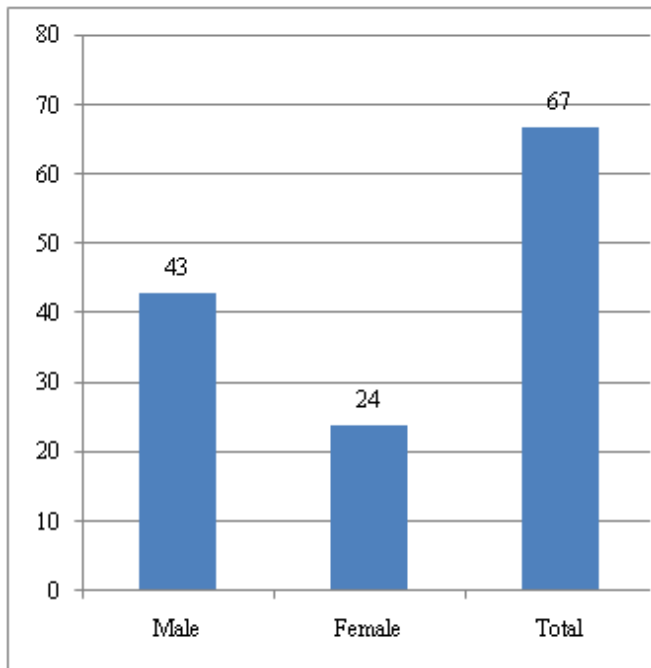
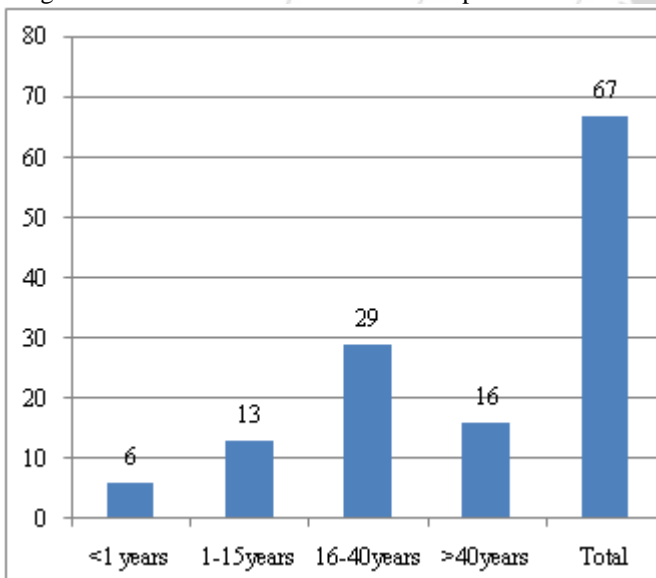


3. Result and Discussions

1. Distribution of *Acinetobacter* isolates among male & female patients . (n=67).



2. Age -wise distribution of *Acinetobacter* species.



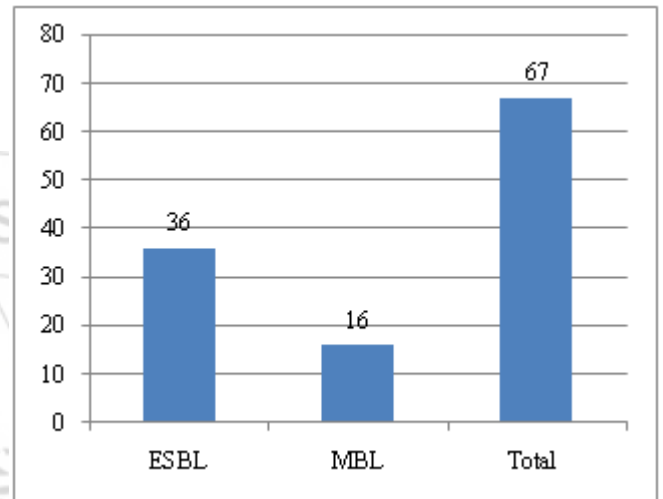
3. Antibiotic sensitivity patterns of *Acinetobacter* species

Antibiotics	Sensitive %
Ampicillin sulbactam	55.23
Ceftazidime	35.45
Ciprofloxacin	50.32
Levofloxacin	50.00
Imipenem	90.12

Meropenem	87.57
Gentamicin	63.45
Amikacin	80.21
Piperacillin	43.81
Piperacillin tazobactam	65.33
Cefepime	25.15
Cefotaxime	33.25
Ceftriaxone	23.67
Tetracycline	25.21
Cotrimoxazole	26.48

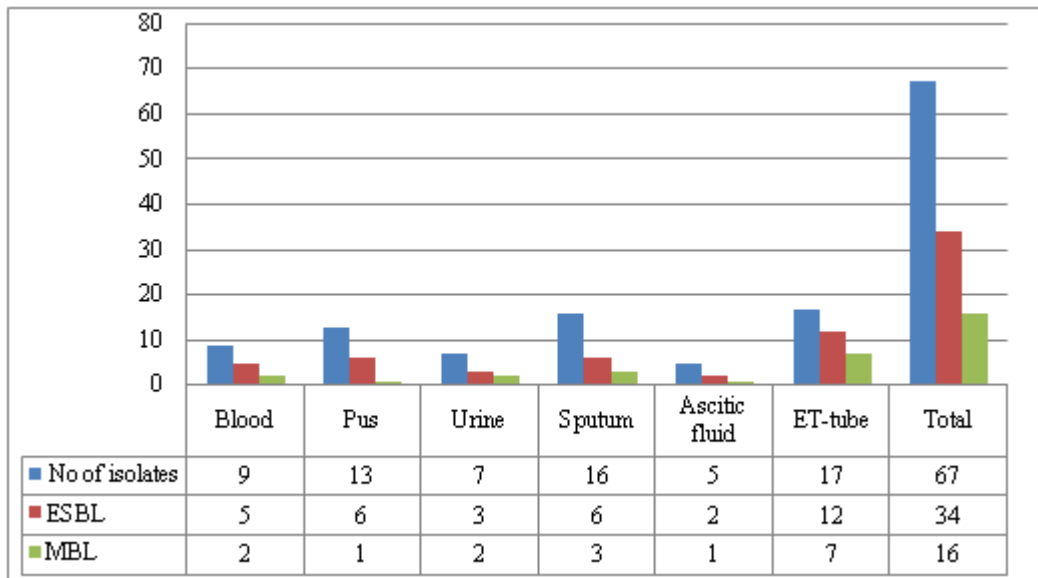
4. ESBL and MBL distribution.

ESBL producer (%)	MBL producer (%)	Total isolates
34 (50.74%)	16 (23.88%)	67



5. Distribution of ESBL and MBL producers in various clinical specimens.

Sample	No of isolates (%)	ESBL producer (%)	MBL producer
Blood	9 (13.43)	5 (14.70)	2 (12.5)
Pus	13 (19.40)	6 (17.64)	1 (6.25)
Urine	7 (10.44)	3 (8.82)	2 (12.5)
Sputum	16 (23.88)	6 (17.64)	3 (18.75)
Ascitic fluid	5 (7.46)	2 (5.88)	1 (6.25)
ET-tubes	17 (25.37)	12 (35.29)	7 (43.75)
Total	67 (100)	34 (100)	16 (100)



Among these isolates, 35.82% was female and 64.17% was male (table 1). *Acinetobacter* infections were more common in patient's age group 16-40 years. (table 2) this study was supported by Hossien Fazeli et al.;[17]. Antibiotic sensitivity patterns of *Acinetobacter* species shows 90% imipenem flowed by 87.57% meropenem and 80.21% amikacin (table 3). This study was similar with Jayapriya Sukumaran et al.,[18] but study by Purti Tripathi [19] shows the most of drug resistance. Out of total 67 isolates 34(50.70%) ESBL producer and 16 (23.88%) was MBL producer (table 4). Similar results were obtained by Vahaboglu et al.[20] Yong et al.[21]., Sinha et al.[22] A recent study introduced a more sensitive procedure for MBL detection in a broad range of host organisms, including carbapenem susceptible isolates.[23] MBL production rate in imipenem resistant *Acinetobacter* ranged from very occasional to as high as 50.00%. Lee et al [24] reported MBL production in imipenem resistant *Acinetobacter* to be 15.10% (range 0-34%). Yong et al [25].The distribution of ESBL and MBL producer in various clinical samples, ET-tubes was highest ESBL 35%, MBL 43.75% producer and least was in Ascitic fluid ESBL 5.88% and MBL 6.25% (table 5). This findings were similar to study by Nachimuthu Ramesh et al.,[26].

4. Conclusions

Observations from the present study showed the *Acinetobacter* species infection is more common in male patients. *Acinetobacter* species were isolated from various clinical samples proved their existence in all sites leading to a range of diseases. Isolates shows 90% imipenem sensitive flowed by 87.57% meropenem and 80.21% amikacin. In above isolates 50.70% ESBL and 23.88% were MBL producer. Hence, the early detection of beta lactamase producing isolates would be important for the reduction of mortality rates and spread of multidrug resistant organism.

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