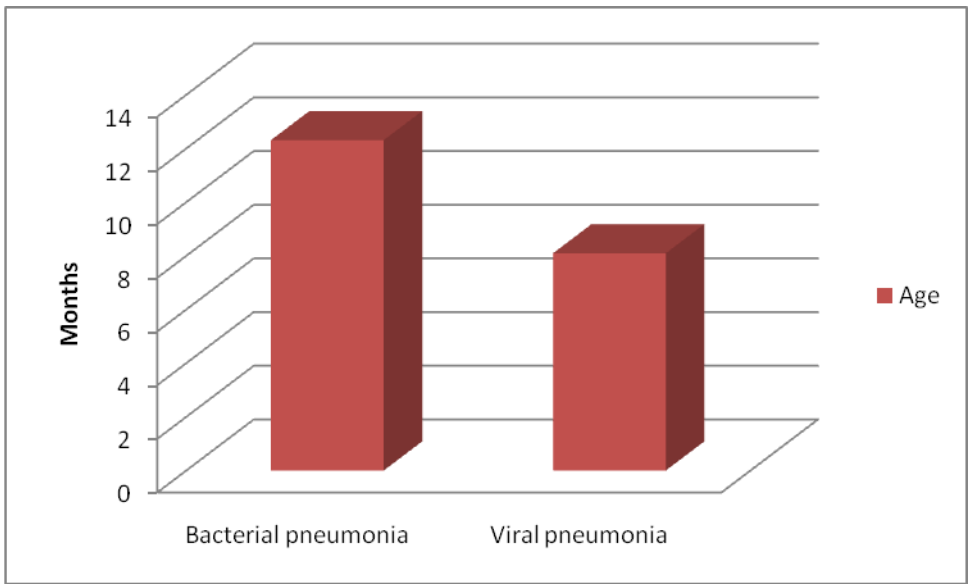
Results

TABLE (1): show suggestive Types of Pneumonia according to age distribution among study group:

Variable	Groups	Bacterial pneumonia (N=18)	Viral pneumonia (n=32)	Mann-whitney test	P value
Age	Mean±SD	12.31±15.82	8.094±11.698	0.416	0.677 NS
	Median	2.5	3.5		

chart (1): show suggestive Types of Pneumonia according to age distribution among study group.

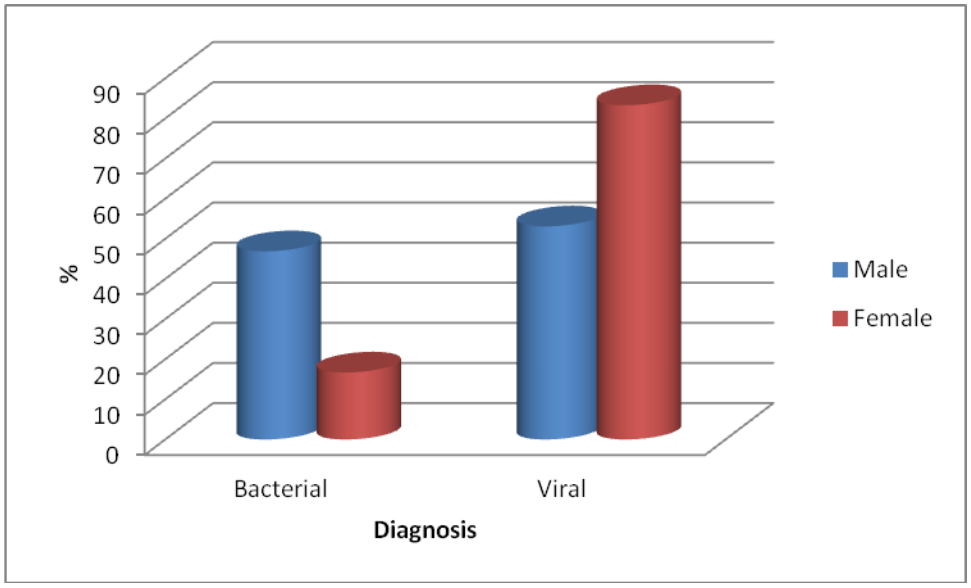


there is no significant difference between both groups as regards the age (P > 0.05).

TABLE (2) : show suggestive Types of Pneumonia According to Sex distribution among Study group:

Sex \ Diagnosis	Bacterial		Viral		Total		Z test	P value
	No	%	No	%	No	%		
Male	15	46.9	17	53.1	32	100.0	0.35	0.36 NS
Female	3	16.7	15	83.3	18	100.0	1.74	0.04 S
Total	18	36.0	32	64.0	50	100.0	2.06	0.02 S

chart (2) : show suggestive Types of Pneumonia According to Sex distribution among Study group:



There is no significance for male distribution(p > 0.05) but There is significant increase in the ratio of female in patient with viral pneumonia in comparisson to bacterial pneumpnia (p < 0.05).

TABLE (3): Show suggestive types of pneumonia according to Clinical presentation among study group:

Diagnosis (symptoms)	**Bacterial N=18**		**Viral N=32**		**Total N=50**		**X2 test**	**P value**
	No	%	No	%	No	%		
Fever	17	94.4	27	84.4	44	88.0	0.358	0.55 NS
Cough	18	100.0	32	100.0	50	100.0	-	-
Shortness of breath	18	100.0	32	100.0	50	100.0	-	-
Others	4	22.2	14	43.8	18	36.0	1.48	0.22 NS

There is no significant for fever ,cough,shortness of breath and others (vomiting,diarrhea,convulsion,…etc) among study group (p > 0.05).

TABLE (4): Show suggestive Types of Pneumonia According to present history among study group:

		Bacterial N=18		Viral N=32		Total N=50		X2 test	P value
		No	%	No	%	No	%		
Onset	**Acute**	18	100.0	31	96.9	49	98.0	0.087	0.77 NS
	Gradual	0	0.0	1	3.1	1	2.0		
Course	**Progressive**	18	100.0	31	96.9	49	98.0	0.087	0.77 NS
	Stationary	0	0.0	1	3.1	1	2.0		

There is no significance for onset and course among study group (p > 0.05).

TABLE (5): Show suggestive Types of Pneumonia According to duration of illness before admission among study group:

Variable		Bacterial pneumonia	Viral pneumonia	Mann-whitney test	P value
Duration of illness(days)	Mean±SD	4.389±3.13	5.094±4.223	0.64	0.522 NS
	Median	3.0	4.0		

There is no significance differrance for duration of days before admission among study group (p > 0.05).

TABLE (6): Show suggestive Types of Pneumonia according to general examination among study group:

Variable	Bacterial pneumonia (Mean±SD)	Viral pneumonia (Mean±SD)	Student t test	P value
Temperature	38.77±0.81	37.84±0.47	5.138	0.001 HS
Respiratory rate	54.39±11.42	50.19±9.38	1.405	0.166 NS

Temperature is high significant for bacterial pneumonia than viral pneumonia(p< 0.01) but There is no significant for respiratory rate among study group (p > 0.05).

TABLE (7): Show suggestive Types of Pneumonia according to presence of cyanosis among study group:

Diagnosis / Cyanosis	**Bacterial N=18**		**Viral N=32**		**Total N=50**		**X2 test**	**P value**
	No	%	No	%	No	%		
Present	4	22.2	2	6.3	6	12.0	1.48	0.22 NS
Total	18	100.0	32	100.0	50	100.0		

There is no significant difference for cyanosis among study group.

TABLE (8): show suggestive Types of Pneumonia according to local examination among study group:

Diagnosis		Bacterial N=18		Viral N=32		Total N=50		X2 test	P value
		No	%	No	%	No	%		
Inspection	Retractions	18	100.0	32	100.0	50	100.0	2.06	0.02 S
	Grunting	13	72.2	15	46.9	28	56.0	3.0	0.08 NS
Palpation	Shifted Trachea	5	27.8	0	0.0	5	10.0	16.9	0.004 HS
	Vocal fremitus	16	88.9	26	81.3	42	84.0	0.09	0.76 NS
Percussion	Localized lobe dullness	5	27.8	0	0.0	5	10.0	16.9	0.004 HS
Auscultation	Diminished air entery	18	100.0	32	100.0	50	100.0	-	-
	Crepitation	18	100.0	32	100.0	50	100.0	-	-
	Wheeze	11	61.1	17	53.1	28	56.0	0.298	0.59 NS

NB: tracheal shift usually comes with collapse and effusion

- Inspection,Palpation and Percussion have variable significance among study group .

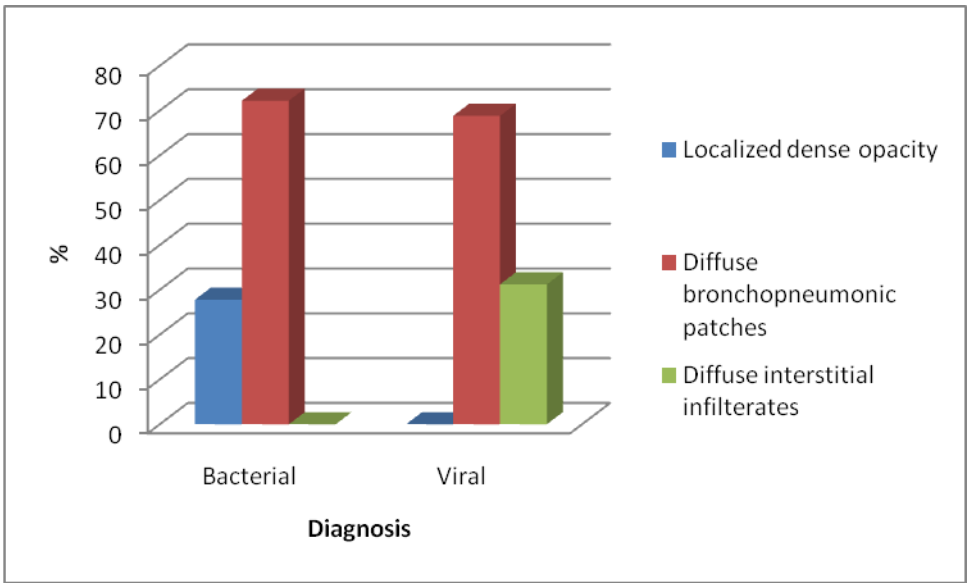
- All cases have diminished air entry and crepitation.

- There is no significant for wheezy chest among study group (p > 0.05)

TABLE (9): show suggestive Types of Pneumonia according to Chest x-ray among study group:

Diagnosis / Chest x ray	Bacterial N=18		Viral N=32		Total N=50		X2 test	P value
	No	%	No	%	No	%		
Localized dense opacity	5	27.8	0	0.0	5	10.0	14.534	0.001 HS
Diffuse bronchopneumonic patches	13	72.2	22	68.8	35	70.0		
Diffuse interstitial infilterates	0	0.0	10	31.2	10	20.0		
Total	18	100.0	32	100.0	50	100.0		

chart (3):show suggestive Types of Pneumonia according to Chest x-ray among study group



N.B: Bacterial Pneumonia appears as localized dence opacity or bronchopneumonic patches (following the recommendation of WHO).

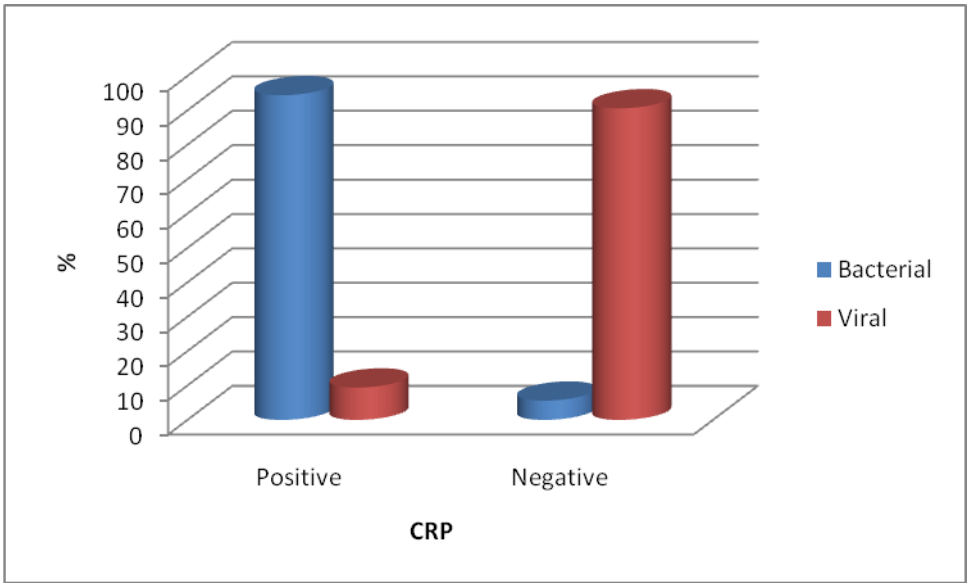
N.B: Viral Pneumonia appears as bronchopneumonic patches or interstitial infiltrates (following the recommendation of WHO).

Localized dence opacity is highly significant for bacterial pneumonia($p<0.01$)but Diffuse bronchopneumonic patches and Diffuse interstitial infilterates are highly significant for viral pneumonia ($p<0.01$).

TABLE (10):show suggestive Types of Pneumonia according to CRP among study group:

Diagnosis / CRP	Bacterial N=18		Viral N=32		Total N=50		X2 test	P value
	No	%	No	%	No	%		
Positive	17	94.4	3	9.4	20	40.0	31.3	0.001 HS
Negative	1	5.6	29	90.6	30	60.0		
Total	18	100.0	32	100.0	50	100.0		

chart(4): show suggestive Types of Pneumonia according to CRP among study group.

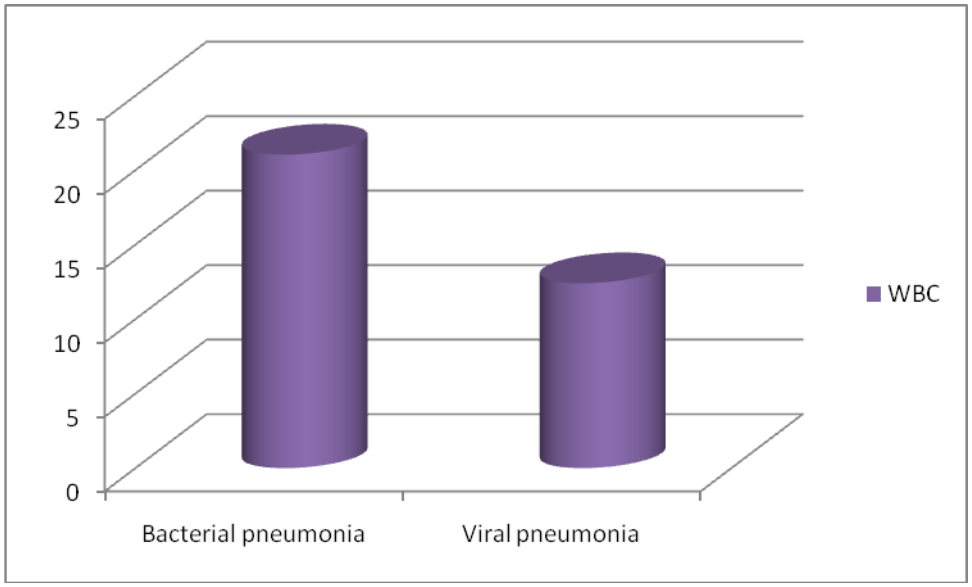


Positive CRP is high significant for bacterial pneumonia but negative CRP is high significant for viral pneumonia among study group (p < 0.01).

TABLE (11): show suggestive types of pneumonia according to WBC count , %PMN and lymphocytes % among study group:

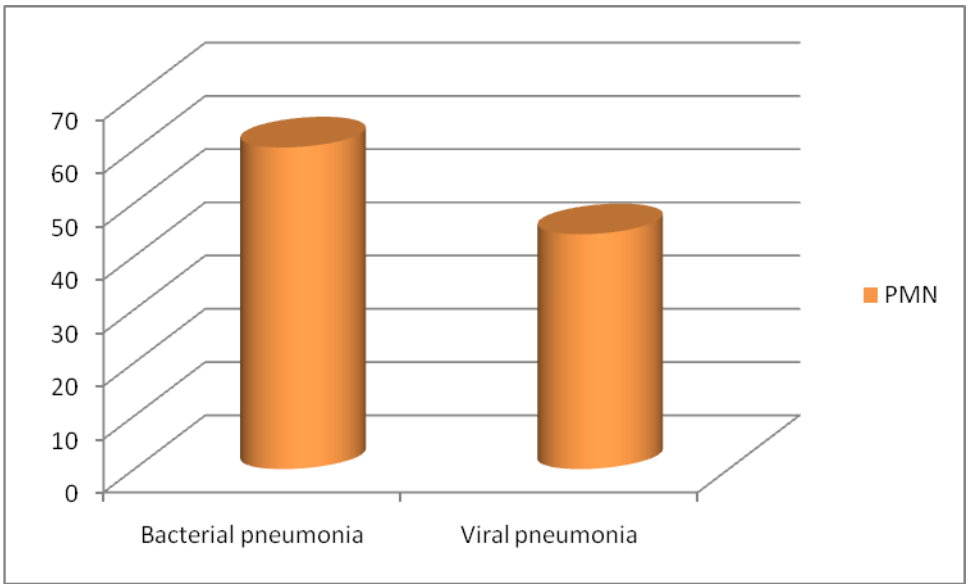
Variable	Bacterial pneumonia (Mean±SD)	Viral pneumonia (Mean±SD)	Student t test	P value
WBC count	21.04±10.39	12.41±4.9	3.99	0.001 HS
%PMN	60.44±19.94	44.125±14.43	3.338	0.002 HS
Lymphocytes%	31.75±18.657	50.5±14.35	3.98	0.001 HS

chart (5):show suggestive types of pneumonia according to WBC count of study group



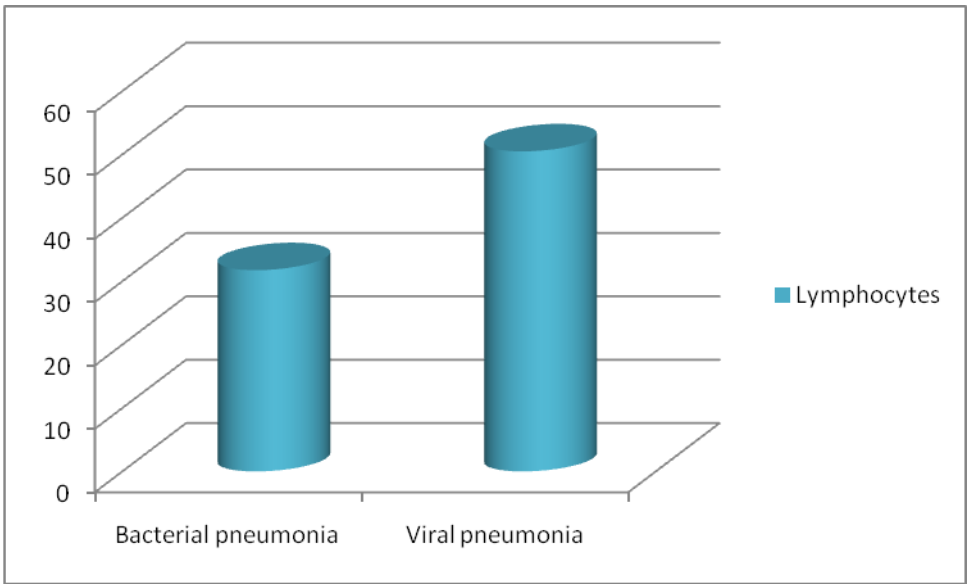
High WBC count is high significant for Bacterial pneumonia than Viral pneumonia among study group (p < 0.01).

Chart (6):show suggestive types of pneumonia according to %PMN of study group



High %PMN high significant with bacterial pneumonia than viral pneumonia among study group (p < 0.01).

Chart (7):show suggestive types of pneumonia according to lymphocytes % of study group



Lymphocytes % is high significant with viral pneumonia than bacterial pneumonia among study group (p < 0.01).

TABLE (12): show treatment among study group according to suggestive Types of Pneumonia :

Diagnosis / Antibiotic course	Bacterial N=18		Viral N=32		Total N=50		X2 test	P value
	No	%	No	%	No	%		
Unasyn +claforan	4	22.2	14	43.7	18	36	27.43	0.001 HS
Unasyn +rosephen	0	0.0	8	25	8	16		
Unasyn +vancomysin	1	5.6	0	0.0	1	2.0		
Unasyn +amikin	0	0.0	1	3.1	1	2.0		
Claforan + vancomysin	1	5.6	1	3.1	2	4.0		
Claforan + amikin+erythromycin	1	5.6	0	0.0	1	2.0		
Fortam +vancomycin	1	5.6	0	0.0	1	2.0		
Vancomycin+amikin	0	0.0	2	6.2	2	4.0		
Vancomycin +meronam.	2	11.1	1	3.1	3	6.0		
Unasyn+claforan +vancomycin.	7	38.8	1	3.1	8	16		
Vancomycin+maxipem.	0	0.0	2	6.2	2	4.0		
Unasyn+claforan +Vancomycin+meronam.	1	5.6	0	0.0	1	2.0		
Vancomysin+ erythromycin	0	0.0	1	3.1	1	2.0		
Rosephen+ erythromycin	0	0.0	1	3.1	1	2.0		
Total	18	100.0	32	100.0	50	100.0		

There is variation in antibiotic treatment of types of pneumonia among study group.

Table (13):show O2 therapy treatment of study group according to suggestive types of pneumonia :

Diagnosis / O2 therapy	Bacterial N=18		Viral N=32		Total N=50	
	No	%	No	%	No	%
Take	18	100.0	32	100.0	50	100.0
Total	18	100.0	32	100.0	50	100.0

All cases are treated by antibiotics and O2 therapy

Table (14): show duration of treatment of study group according to suggestive types of pneumonia :

Variable	Bacterial pneumonia (Mean±SD)	Viral pneumonia (Mean±SD)	Student t test	P value
Duration of ttt	13.83±4.81	10.69±3.64	2.61	0.012 S

Long duration of treatment is significant with bacterial pneumonia than viral pneumonia (p <0.05).