RESULTS

Presentation and Analysis Of Data

Findings of this study will be presented in different sections.

Section (I): Present description of sociodemographic variables of the studied group. **(Table 1).**

Section (II): Present description of the studied group as regards to burn related data,Site of burn**(Table 2&3)**,Duration of hospitalization,pain degree, causes of pain, and physical, psychological, and social needs **(figures 6to 9).**

Section (III): Present relation between burn, Type, site, and duration of hospitalization with pain degree **(Table 4& 5)** .

- Relation between burn site with hospitalization, physical, psychological, and social needs**(Table 6 to 9).**
- Relation between patients needs with degree,Types of burn, and sociodemographic data of studied group **(Table10 to 14).**

Table (1): Sociodemographic characteristics of the studied group (N= 60).

Demographic characteristics	No.	%
Age		
< 30	41	68.4
- 40	11	18.3
>50	8	13.3
Gender		
Male	36	60.00
Female	24	40.00
Marital status		
Single	31	51.67
Married	23	38.33
Divorced or widowed	6	10.00
Residence		
Rural	43	71.67
Urban	17	28.33
Level of Education		
Illiterates	8	13.33
Read&write	17	28.33
Secondary	25	41.67
University	10	16.67
Occupation		
Not working	22	36.67
Worker	20	33.33
Employee	6	10.00
Student	12	20.00

The above table shows that more than two third 41(68.4%) of the studied group their age less than 30 years. and 36(60%) are male, approximately half of studied group 31(51.67%) are single. and 43(71.67%) of the studied group are coming from rural areas. It also shows that 25(41.67%) their educational level is secondary. More than one third 22(36.67%) are not working.

Table (2): Description of burn related data among the studied group (N=60).

Burn Related Data	No.	%
Cause of burn		
Accident	56	93.33
Other	4	6.67
Types of burn		
Thermal	47	78.33
Scald	9	15.00
Electricity	3	5.00
Chemical	1	1.67
Degree of burn		
First degree	17	28.33
Second degree	16	26.67
Third degree or more	27	45.00
Percentage of burn		
0-10	11	18.33
11-20	25	41.67
21-30	12	20.00
31-40	6	10.00
> 40	6	10.00
Burn infection		
Absent	25	41.67
Present	35	58.33
Associated Chronic disease		
Diabetes	6	10.00
Hypertension	6	10.00
Heart disease	3	5.00
Renal Failure	3	5.00
Non	42	70.00
Skin grafts		
Not done	21	35.00
Done	39	65.00
Frequency of skin grafts		
Once	30	50.00
More than one	9	15.00

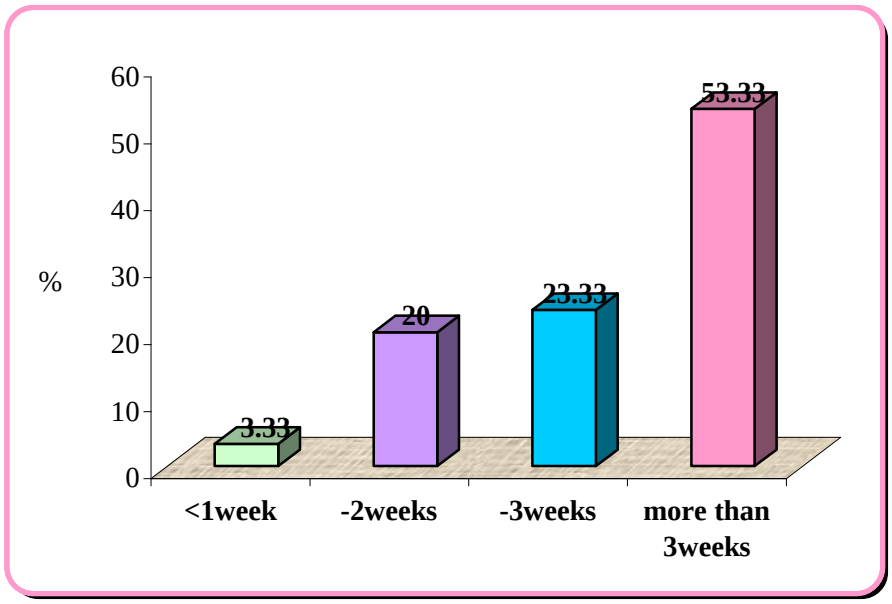
The above table shows that the majority of the studied group 56(93.33%) their burn occurs due to accident,only 18(30%)of the studied group have associated chronic diseases,more than half 35(58.33%) have burn injure and less than half 27(45.00%) have third degree of burn.Most of them 47(78.33%)have thermal burn. More than one third 24 (40.00%) have more than (21%) of total body surface area burn. More than half of the studied group 35 (58.33%) have burn infection.. The table also shows that approximately two third of the studied group 39 (65.00%) have skin graft, only 9 (15.00%) of them have more than one skin graft operation.

Table (3): Frequency distribution of burned patients according to burn site among studied group (N =60).

Site of Burn	No	%
-Scalp	5	8.33
-face	43	71.67
-Neck	20	33.33
-hands	43	71.67
-foot	12	20.00
-chest	10	16.67
-Abdomen	14	23.33
-Back	9	15.00
-thigh	11	18.33
-Upper arm	39	65.00
-Upper leg	25	41.67

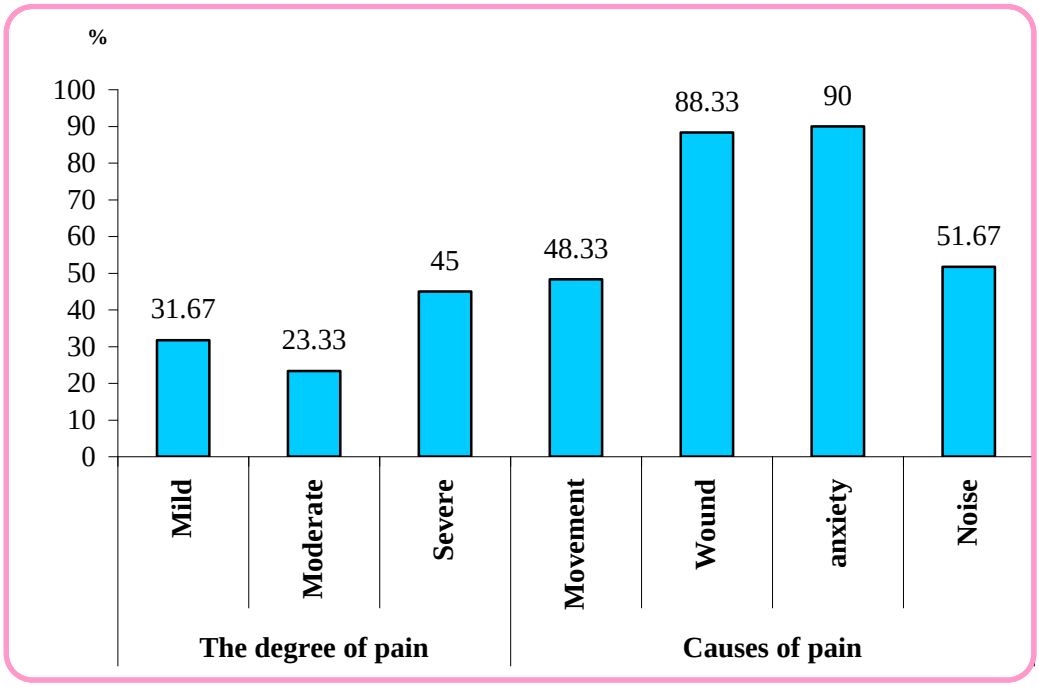
The above table shows that the highest frequency of burn site are face 43(71.67%), hands 43(71.67%), and upper arm 39(65.00%),while the least are in the scalp 5(8.33%).

Fig. (6): Percentage Distribution of duration of hospitalization among studied group (N = 60).



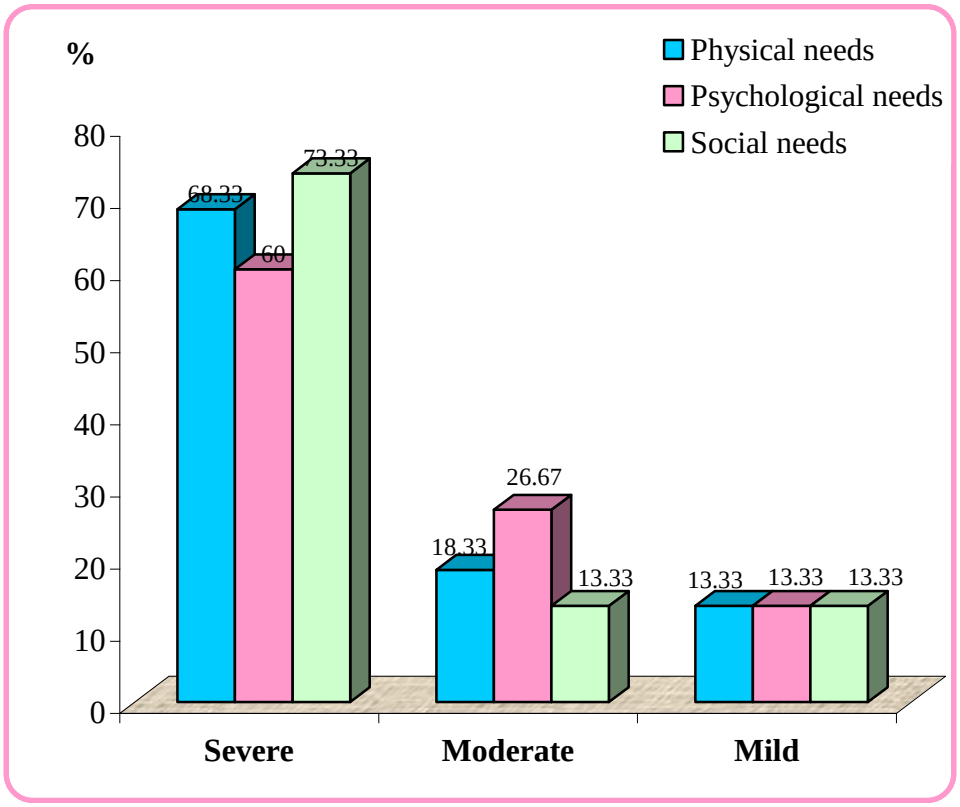
The above figure shows that more than half of the studied group (53.33%) their duration of hospitalization was more than 3weeks while the least (3.33%)have less than one week.

Fig. (7): Percentage Distribution of the studied group according to their degrees and causes of pain (N = 60).



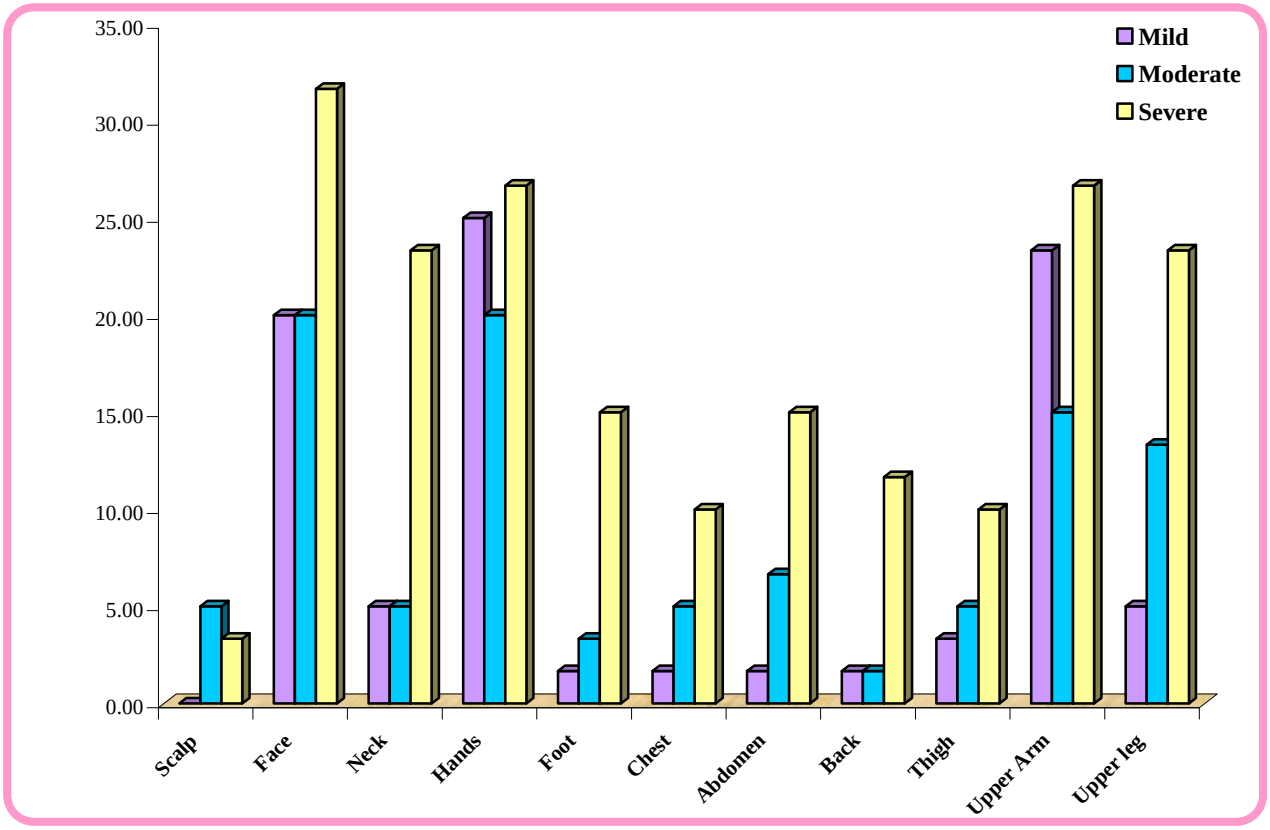
The above figure shows that the highest percentages27 (45.00%) of the studied group have severe pain. It also shows that the majority of the studied group54(90.00%) relate their pain causes due to anxiety and wound 53 (88, 33%).

Fig. (8): Frequency distribution of the physical, psychological and social needs of the studied group ***(N = 60).***



The above figure shows that the highest percentage of patients express severe physical ,psychological&social needs 41(68.33%), 36(60.00%),and 44(73.33%) respectively.

Figure (9): Percentage distribution of patient's pain in the studied group according to burn site (N=60).



The above figure shows that the majority of patients in the studied group who express severe pain.Those who have pain in face 43(71.67%), hands 43(71.67%), and upper arm .

Table (4): Relation between Types of burn and degree of pain among the studied group (N=60).

Types of burn	Degree of pain							
	Mild		Moderate		Severe		Total	
	No	%	No	%	No	%	No	%
Thermal	15	25.00	11	18.33	21	35.00	47	78.33
Scald	2	3.33	2	3.33	5	8.33	9	15.00
Electrical	1	1.67	1	1.67	1	1.67	3	5.00
Chemical	1	1.67	0	0.00	0	0.00	1	1.67
Total	19	31.67	14	23.33	27	45.00	60	100.00
Chi-square	X^2 2.863							
	P-value 0.826 NS**							

Table 7 Illustrates that 21 (35.00%) of patients among studied group have sever pain due to thermal burn. While there is neither moderate nor severe pain for those patients who have chemical burns. There is no significant statistical difference between type of burn and degree of pain.

****NS= P-value not significant**

Table (5): Relation between duration of hospitalization and degree of pain among studied group (N=60).

Duration of hospitalization	Degree of pain							
	Mild		Moderate		Severe		Total	
	No	%	No	%	No	%	No	%
<1week	2	3.33	0	0.00	0	0.00	2	3.33
-2weeks	12	20.00	0	0.00	0	0.00	12	20.00
-3weeks	5	8.33	8	13.33	1	1.67	14	23.33
more than 3weeks	0	0.00	6	10.00	26	43.33	32	53.33
Total	19	31.67	14	23.33	27	45.00	60	100.00
Chi-square	X^2 61.366							
	P-value 0.000 Sign.*							

This table shows that high percentage of patients who spent more than 3 weeks in hospital have severe pain 26 (43.33%),while those who stays less than one week 2(3,33%) and two weeks 12(20.00%) have only mild pain. There is high statistical significant difference between duration of hospitalization and degree of pain.

***P-value significant.**

Table (6): Relationship between site of burn and duration of hospitalization among studied group (N=60).

Site of burn	Duration of hospitalization									
	<1week		1-2weeks		2-3weeks		more than 3weeks		Chi-square	
	No	%	No	%	No	%	No	%	X^2	P-value
Scalp	0	0.00	0	0.00	0	0.00	5	8.33	4.773	0.189 NS**
Face	1	1.67	9	15.00	9	15.00	24	40.00	1.079	0.782 NS**
Neck	0	0.00	2	3.33	3	5.00	15	25.00	6.033	0.110 NS**
Hands	1	1.67	11	18.33	10	16.67	21	35.00	3.402	0.334 NS**
Foot	0	0.00	1	1.67	2	3.33	9	15.00	3.127	0.372 NS**
Chest	1	1.67	0	0.00	3	5.00	6	10.00	4.329	0.228 NS**
Abdomen	0	0.00	0	0.00	4	6.67	10	16.67	5.597	0.133 NS**
Back	0	0.00	1	1.67	1	1.67	7	11.67	2.635	0.451 NS**
Thigh	0	0.00	1	1.67	4	6.67	6	10.00	2.234	0.525 NS**
Upper Arm	1	1.67	10	16.67	11	18.33	17	28.33	5.088	0.165 NS**
Upper leg	0	0.00	0	0.00	8	13.33	17	28.33	13.108	0.004 Sign.*

This table shows that the highest frequency of the studied group 24(40.00)who stayed more than 3 weeks in hospital are those with face burn,followed by hands 21(35.00%),upper arm 17(28.33%) and upper leg 17(28.33%).It also shows that there is no significant statistical difference between duration of hospitalization and all site of burn except with burn in the upper legs that are only significant X^2= 23.108 (0.004).

***P-value significant.**

****NS= P-value not significant.**

Table (7): Relationship between site of burn and physical needs among the studied group (N = 60).

Burn site	Physical needs				
	Mean	±	SD	T-test	P-value
Scalp	65.600	±	12.280	0.419	0.677 NS**
Face	64.047	±	17.124	3.409	0.001 Sign.*
Neck	65.100	±	21.526	1.123	0.266 NS**
Hands	61.647	±	13.993	5.559	0.000 Sign.*
Foot	59.000	±	16.547	1.962	0.055 NS**
Chest	66.400	±	28.044	0.491	0.625 NS**
Abdomen	76.143	±	22.607	1.382	0.172 NS**
Back	72.222	±	28.468	0.434	0.666 NS**
Thigh	79.273	±	24.104	10754	0.085 NS**
Upper arm	65.692	±	17.511	1.903	0.062 NS**
Upper leg	62.560	±	19.022	2.199	0.032 NS**

There is a high statistical significant difference between physical needs and burn in face and hands.

***P-value significant.**

****NS= P-value not significant**

Table (8): Relationship between site of burn and Psychological needs among studied group (N = 60).

Burn site	Psychological needs				
	Mean	±	SD	T-test	P-value
Scalp	63.400	±	23.212	1.924	0.059 NS**
Face	77.651	±	18.927	1.049	0.299 NS**
Neck	76.300	±	18.776	0.838	0.406 NS**
Hands	78.302	±	20.386	0.639	0.525 NS**
Foot	84.833	±	21.191	1.078	0.285 NS**
Chest	77.800	±	19.303	0.266	0.791 NS**
Abdomen	86.857	±	22.346	1.649	0.105 NS**
Back	80.556	±	22.490	0.199	0.843 NS**
Thigh	48.455	±	21.782	0.949	0.346 NS**
Upper arm	83.103	±	19.831	2.067	0.043 NS**
Upper leg	83.800	±	22.316	1.494	0.141 NS**

That there is no statistical significant difference between psychological needs and site of burn.

****NS= P-value not significant**

Table (9): Relationship between site of burn and social needs among studied group (N=60).

Burn site	Social needs				
	Mean	±	SD	T	P-value
Scalp	15.200	±	5.020	0.261	0.795NS**
Face	15.442	±	4.687	0.712	0.479NS**
Neck	15.750	±	4.459	0.061	0.952NS**
Hands	15.326	±	4.729	1.038	0.304NS**
Foot	13.750	±	5.479	10727	0.090NS**
Chest	14.900	±	5.238	0.620	0.538NS**
Abdomen	16.786	±	3.786	1.044	0.301NS**
Back	14.778	±	5.540	0.672	0.504NS**
Thigh	17.727	±	3.259	1.700	0.095NS**
Upper arm	15.564	±	4.400	0.320	0.750NS**
Upper leg	16.360	±	4.102	0.971	0.335NS**

There is no statistical significant difference between social needs and site of burn.

****NS= P-value not signi**

Table (10): Relation between patients needs and degree of burn among studied group (N=60).

Dgree of burn	Patients needs		
	Physical needs	**Psychological needs**	**Social needs**
First degree			
Mean ± SD	75.06 ± 23.43	72.88 ± 18.46	15.12 ± 5.68
Second degree			
Mean ± SD	59.25 ± 12.90	75.38 ±16.86	15.81 ± 3.08
Third degree			
Mean ± SD	71.85 ± 21.92	85.74±20.84	16.00 ± 4.39
F-Test	**2.982**	**2.990**	**0.207**
P- value	**0.047 NS****	**0.044 NS****	**0.814 NS****

There is not statistical significant difference between degree of burn and patients physical,psychological a well as social needs.

****NS= P-value not significant**

Table (11): Relation between types of burn and patients needs among studied group (N=60).

Type of burn	Patients needs		
	Physical needs	**Psychological needs**	**Social needs**
Thermal			
Mean ± SD	69.79 ± 21.89	77.17 ± 20.85	15.70 ± 3.89
Scald			
Mean ± SD	69.78 ± 20.63	90.56 ± 13.30	15.89 ± 5.40
Electricity			
Mean ± SD	65.33 ± 15.14	79.67 ± 12.70	19.67 ± 0.58
Chemical			
Mean ± SD	60.00 ± 00	79.00 ± 00	2.00± 00
F-Test	**0.105**	**1.163**	**4.714**
P- value	**0.957 NS****	**0.332 NS****	**0.005 Sign.***

There is no statistical significant difference between types of burn and patients physical as well as psychological needs. But there is significant difference with social needs P-value= (0.005).

***P-value significant.**
****NS= P-value not significan**

Table (12): Relation between demographic characteristics and patients Physical needs among studied group (N= 60).

Demographic characteristics	Physical needs									
	Not satisfaction		Partial		Satisfaction		Total		Chi-square	
	No	%	No	%	No	%	No	%	X^2	P-value
Age										
<30	7	11.67	5	8.33	2	3.33	14	23.33		
-40	10	16.7	6	10	5	8.33	21	35.00	2.344	0.162
>50	13	21.7	9	15	3	5	25	41.67		**NS****
Gender										
Male	24	40.00	5	8.33	7	11.67	36	60.00	3.527	0.171
Female	17	28.33	6	10.00	1	1.67	24	40.00		**NS****
Marrital status										
Single	21	35.00	6	10.00	4	6.67	31	51.67		
Married	17	28.33	3	5.00	3	5.00	23	38.33	1.481	0.830
divorced or widowed	3	5.00	2	3.33	1	1.67	6	10.00		**NS****
Residence										
Rural	30	50.00	9	15.00	4	6.67	43	71.67	2.453	0.293
Urban	11	18.33	2	3.33	4	6.67	17	28.33		**NS****
Level of education										
Illiterate	5	8.33	3	5.00	0	0.00	8	13.33		
Read&write	12	20.00	3	5.00	2	3.33	17	28.33	6.487	0.371
Secondary	15	25.00	5	8.33	5	8.33	25	41.67		**NS****
University	9	15.00	0	0.00	1	1.67	10	16.67		
Occupation										
Not working	15	25.00	7	11.67	0	0.00	22	36.67		
Worker	12	20.00	3	5.00	5	8.33	20	33.33	16.736	0.010
Employee	3	5.00	1	1.67	2	3.33	6	10.00		**NS****
Student	11	18.33	0	0.00	1	1.67	12	20.00		

This table shows that there is no statistical significant difference between patients Physical needs and demographic characteristic among studied group.

****NS= P-value not significan**

Table (13): Relation between demographic characteristics and patients Psychological needs among studied group (N=60).

Demographic characteristics	Psychological needs									
	Not satisfaction		Partial		Satisfaction		Total		Chi-square	
	No	%	No	%	No	%	No	%	X^2	P-value
Age										
<30	6	10	5	8.33	9	15	20	33.33		
-40	5	8.33	6	10	12	20	23	38.33	5.333	0.022
>50	3	5	5	8.33	9	15	17	28.33		**NS****
Gender										
Male	5	8.33	12	20.00	19	31.67	36	60.00	2.303	0.316
Female	3	5.00	4	.6.67	17	28.33	24	40.00		**NS****
Marrital status										
Single	4	6.67	5	8.33	22	36.67	31	51.67		
Married	3	5.00	9	15.00	11	18.33	23	38.33	4.123	0.390
divorced or widowed	1	1.67	2	3.33	3	5.00	6	10.00		**NS****
Residence										
Rural	6	10.00	11	18.33	26	43.33	43	71.67	0.116	0.944
Urban	2	3.33	5	8.33	10	16.67	17	28.33		**NS****
Level of education										
Illiterate	0	0.00	2	3.33	6	10.00	8	13.33		
Read&write	2	3.33	7	11.67	8	13.33	17	28.33	5.981	0.425
Secondary	5	8.33	6	10.00	14	23.33	25	41.67		**NS****
University	1	1.67	1	1.67	8	13.33	10	16.67		
Occupation										
Not working	3	5.00	4	6.67	15	25.00	22	36.67		
Worker	2	3.33	8	13.33	10	16.67	20	33.33	15.364	0.018
Employee	0	0.00	4	6.67	2	3.33	6	10.00		**NS****
Student	3	5.00	0	0.00	9	15.00	12	20.00		

This table shows that there is no statistical significant difference between patient's psychological needs and demographic characteristics among studied group. ****NS= P-value not significant**

Table (14): Relation between demographic characteristics and patient's social needs among studied group (N= 60).

Demographic characteristics	Social needs									
	Not satisfaction		Partial		Satisfaction		Total		Chi-square	
	No	%	No	%	No	%	No	%	X^2	P-value
Age										
<30	5	8.33	6	10	10	16.7	21	35.00		
-40	3	5	5	8.33	10	16.7	18	30.00	1.443	0.844
>50	3	5	6	10	12	20	21	35.00		**NS****
Gender										
Male	5	8.33	5	8.33	26	43.33	36	60.00	0.057	0.972
Female	3	5.00	3	5.00	18	30.00	24	40.00		**NS****
Marrital status										
Single	4	6.67	5	8.33	22	36.67	31	51.67		
Married	3	5.00	2	3.33	18	30.00	23	38.33	0.828	0.935
divorced or widowed	1	1.67	1	1.67	4	6.67	6	10.00		**NS****
Residence										
Rural	7	11.67	5	8.33	31	51.67	43	71.67	1.351	0.509
Urban	1	1.67	3	5.00	13	21.67	17	28.33		**NS****
Level of education										
Illiterate	2	3.33	1	1.67	5	8.33	8	13.33		
Read&write	2	3.33	2	3.33	13	21.67	17	28.33	1.557	0.956
Secondary	3	5.00	3	5.00	19	31.67	25	41.67		**NS****
University	1	1.67	2	3.33	7	11.67	10	16.67		
Occupation										
Not working	3	5.00	3	5.00	16	26.67	22	36.67		
Worker	4	6.67	2	3.33	14	23.33	20	33.33	2.876	0.824
Employee	0	0.00	1	1.67	5	8.33	6	10.00		**NS****
Student	1	1.67	2	3.33	9	15.00	12	20.00		

This table shows that there is no significant difference between patient's social needs and demographic characteristics among studied group.

****NS= P-value not signific**