Results

Table 12: Age of the studied cases.

	Asthma	Diabetes	Renal	ANOVA	
				F. test	P-value
Range	**5-12**	**5-16**	**8-17**	**17.325**	**0.009**
Mean ± SD	**8±1.947**	**10.95±3.47**	**14.50±2.58**		

Table 13: Demographic data of the studied cases in different chronic diseases and control groups.

		Asthma	Diabetes	Renal	Control	X^2	P-value
Sex	**Male**	9	11	12	10	0.141	0.934
		45%	55%	60%	50%		
	Female	11	9	8	10		
		55%	45%	40%	50%		
Socio-economic status	**Low**	17	16	19	12	4.235	0.019*
		85%	80%	95%	60%		
	Moderate	3	4	1	8		
		15%	20%	5%	40%		
Education level	**Never Joined school**	0	1	1	0	5.302	0.028*
		0%	5%	5%	0%		
	Discontinue	1	2	7	0		
		5%	10%	35%	0%		
	Still at School	18	17	12	20		
		90%	85%	60%	100%		

This table shows that incidence of low social class is significant and most of the patients are still in the education.

Table14: Incidence of complications in each chronic disease

		Asthma	Diabetes	Renal	Total
(+ve)	N	2	10	18	30
	%	10%	50%	90%	50%
(-ve)	N	18	10	2	30
	%	90%	50%	10%	50%
Total	N	20	20	20	60
	%	100%	100%	100%	100%
Chi-square	X^2	21.369			
	P-value	<0.002*			

This table shows highly significant difference [P-value<0.002] between the different diseases as regard to complications; as 18 (90%) of renal patients have complications, then 10(50%) of diabetic patients have complications, the least percentage of complications incidence was in asthmatic patients (10%=2 patients).

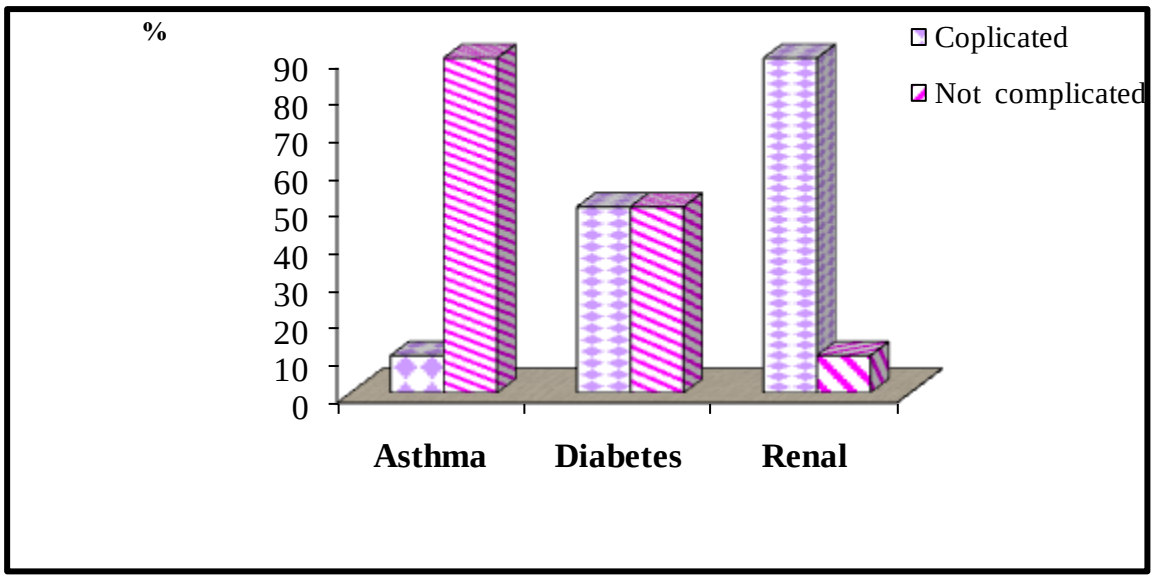

Fig.(5): Incidence of complications in different chronic diseases in the study.

Table 15: Compliance to treatment in the studied cases in each chronic disease.

Compliance		Asthma	Diabetes	Renal	Total
(+ve)	N	18	18	17	53
	%	90%	90%	85%	88.33%
(-ve)	N	2	2	3	7
	%	10%	10%	15%	11.67%
Total	N	20	20	20	60
	%	100%	100%	100%	100%
Chi-square	X^2	28.325			
	P-value	<0.001*			

This table shows high significant difference [P-value<0.001], as majority of patients were compliant to treatment.

Table16: Duration of each chronic disease in the studied cases.

		Asthma	Diabetes	Renal	Total
<1year	N	0	2	1	3
	%	0%	10%	5%	5%
>1year	N	20	18	19	57
	%	100%	90%	95%	95%
Total	N	20	20	20	60
	%	100%	100%	100%	100%
Chi-square	X^2	3.628			
	P-value	0.363			

The table shows that majority of study cases were more than one year.

Table17: Comparison of anxiety grades between patients of different chronic diseases and control groups.

Anxiety		Groups				
		Asthma	Diabetes	Renal	Control	Total
Mild	N	8	9	5	13	35
	%	40%	45%	25%	65%	43.75%
Moderate	N	10	8	10	7	35
	%	50%	40%	50%	35%	43.75%
Severe	N	2	3	5	0	10
	%	10%	15%	25%	0%	12.5%
Total	N	20	20	20	20	80
	%	100%	100%	100%	100%	100%
Chi-square	^{2} X	**13.692**				
	P-value	**0.028***				

The table shows significant increase in anxiety between the chronic diseased patients than healthy children with P-value=0.028.

.**Table 18: Comparison of depression grades between patients of different chronic diseases and control groups.**

Depression		Groups				
		Asthma	Diabetes	Renal	Control	Total
No	N	13	15	4	18	50
	%	65%	75%	20%	90%	62.50%
Mild	N	5	3	11	2	21
	%	25%	15%	55%	10%	26.25%
Moderate	N	2	2	3	0	7
	%	10%	10%	15%	0%	8.75%
Severe	N	0	0	2	0	2
	%	0%	0%	10%	0%	2.50%
Total	N	20	20	20	20	80
	%	100%	100%	100%	100%	100%
Chi-square	^{2} X	26.720				
	P-value	0.002*				

The table shows high significant increase in depression between the chronic diseased patients than healthy children with P-value=0.002.

Table19: Comparison of anxiety between patients in different chronic diseases and control groups as regard to sex.

Groups	Anxiety	Sex							
		Male		Female		Total		Chi-square	
		N	%	N	%	N	%	X^2	P-value
Asthma	Mild	5	25%	3	15%	8	40%	2.925	0.045*
	Moderate	4	20%	6	30%	10	50%		
	Severe	0	0%	2	10%	2	10%		
Diabetes	Mild	8	40%	1	5%	9	45%	1.147	0.541
	Moderate	3	15%	5	25%	8	40%		
	Severe	0	0%	3	15%	3	15%		
Renal	Mild	5	25%	0	0%	5	25%	2.626	0.040*
	Moderate	6	30%	4	20%	10	50%		
	Severe	1	5%	4	20%	5	25%		
Control	Mild	10	50%	3	15%	13	65%	2.842	0.077
	Moderate	0	0%	7	35%	7	35%		

There is significant difference between male and female patients in anxiety as female patients show anxiety more than males in asthma [with P-value=0.045] and in patients on regular hemodialysis [with P-value=0.040].

Table 20: Comparison of depression between patients and control groups in different chronic diseases as regard to sex.

Groups	Depression	Sex							
		Male		Female		Total		Chi-square	
		N	%	N	%	N	%	X^2	P-value
Asthma	No	8	40%	5	25%	13	65%	1.532	0.468
	Mild	1	5%	4	20%	5	25%		
	Moderate	0	0%	2	10%	2	10%		
Diabetes	No	10	50%	5	25%	15	75%	1.501	0.247
	Mild	0	0%	3	15%	3	15%		
	Moderate	1	5%	1	5%	2	10%		
Renal	No	3	15%	1	5%	4	20%	2.600	0.031*
	Mild	8	40%	3	15%	11	55%		
	Moderate	0	0%	3	15%	3	15%		
	Severe	0	0%	2	10%	2	10%		
Control	No	10	50%	8	40%	18	90%	1.485	0.267
	Mild	0	0%	2	10%	2	10%		

There is significant difference between male and female patients in depression as female patients on regular hemodialysis show depression more than males [P-value=0.031].

Table 21: Comparison of anxiety between patients as a whole and control group as regard to sex

Groups	Anxiety	Sex							
		Male		Female		Total		Chi-square	
		N	%	N	%	N	%	X^2	P-value
Patients	Mild	18	30%	4	6.6%	22	36.7%	4.327	0.026*
	Moderate	13	21.7%	15	25%	28	46.7%		
	Severe	1	1.6%	9	15%	10	16.6%		
Control	Mild	10	50%	3	15%	13	65%		
	Moderate	0	0%	7	35%	7	35%		

There is significant increase in anxiety between the chronic diseased patients than healthy children as healthy children show no severe anxiety while 10(16.6%) of chronic diseased patients have severe anxiety.

Table 22: Effect of age of patients on anxiety between different diseases and control groups.

Age	Anxiety	Age		ANOVA	
		Range	Mean ± SD	f	P-value
Asthma	Mild	5 - 7	6.250 ± 0.886	25.312	<0.001*
	Moderate	7 - 10	8.700 ± 1.160		
	Severe	11 - 12	11.500 ± 0.707		
Diabetes	Mild	5 - 16	10.778 ± 3.898	0.262	0.772
	Moderate	6 - 14	10.625 ± 3.292		
	Severe	9 - 16	12.333 ± 3.512		
Renal	Mild	8 - 17	13.800 ± 3.768	0.234	0.794
	Moderate	12 - 17	14.800 ± 1.549		
	Severe	9 - 17	14.600 ± 3.362		
Control	Mild	5 - 16	9.615 ± 3.641	3.736	0.069
	Moderate	9 - 17	12.714 ± 2.928		

This table shows high significant increase in anxiety with aging of asthmatic patients with P-value<0.001

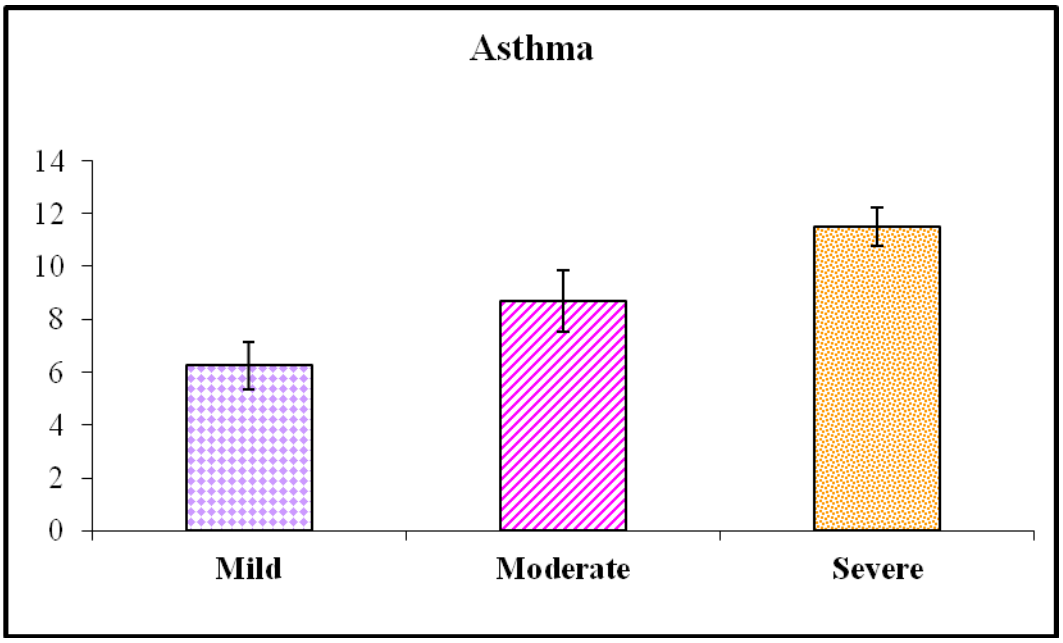

Fig. (6): Anxiety increases with age in asthmatic patients.

Table23: Effect of age of patients on depression between different diseases and control groups.

Age	Depression	Range	Mean ± SD	ANOVA	
				f	P-value
Asthma	Mild	5 - 9	6.846 ± 1.144	26.688	<0.001*
	Moderate	9 - 10	9.600 ± 0.548		
	Severe	11 - 12	11.500 ± 0.707		
Diabetes	Mild	5 - 15	10.067 ± 3.262	2.346	0.126
	Moderate	9 - 16	13.000 ± 3.606		
	Severe	13 - 16	14.500 ± 2.121		
Renal	No	14 - 16	14.750 ± 0.957	2.639	0.028*
	Mild	8 - 17	13.727 ± 3.165		
	Moderate	16 - 17	16.333 ± 0.577		
	Severe	14 - 17	15.500 ± 2.121		
Control	Mild	5 - 16	10.444 ± 3.518	0.873	0.363
	Moderate	9 - 17	13 ± 5.657		

The table shows highly significant increase in depression with age increase between asthmatic patients with P-value<0.001 and significant increase in depression in patients on regular hemodialysis with P-value=0.028.

Table 24: Effect of disease complications on anxiety.

Groups	Anxiety	Complications							
		(-ve)		(+ve)		Total		Chi-square	
		N	%	N	%	N	%	X^2	P-value
Asthma	Mild	8	40%	0	0%	8	40%	20.253	<0.001*
	Moderate	10	50%	0	0%	10	50%		
	Severe	0	0%	2	10%	2	10%		
Diabetes	Mild	5	25%	4	20%	9	45%	1.869	0.050*
	Moderate	4	20%	4	20%	8	40%		
	Severe	1	5%	2	10%	3	15%		
Renal	Mild	1	5%	4	20%	5	25%	2.639	0.049*
	Moderate	0	0%	10	50%	10	50%		
	Severe	1	5%	4	20%	5	25%		

Highly significant increase in anxiety scores [P-value<0.001] in severely diseased asthmatic patients, and significant increase in anxiety with increased complications of diabetes [P-value=0.050] and in ESRD [P-value=0.049].

Table25: Effect disease complications on depression.

Groups	Depression	Complications							
		(-ve)		(+ve)		Total		Chi-square	
		N	%	N	%	N	%	X^2	P-value
Asthma	No	13	65%	0	0%	13	65%	15.361	0.002*
	Mild	5	25%	0	0%	5	25%		
	Moderate	0	0%	2	10%	2	10%		
Diabetes	No	9	45%	6	30%	15	75%	2.933	0.231
	Mild	1	5%	2	10%	3	15%		
	Moderate	0	0%	2	10%	2	10%		
Renal	No	0	0%	4	20%	4	20%	2.996	0.030*
	Mild	1	5%	10	50%	11	55%		
	Moderate	1	5%	2	10%	3	15%		
	Severe	0	0%	2	10%	2	10%		

Significant increase in depression scores [P-value=0.002] in asthmatic patients with complications and with increased severity of renal failure [P-value=0.030].

Table 26: Effect of disease duration on anxiety and depression

	Duration			
	<1year	>1year	**T-test**	
	Mean ± SD	Mean ± SD	T	P-value
Anxiety	11 ± 2.449	23.736 ± 5.812	-5.697	<0.001*
Depression	7.857 ± 6.094	10.170 ± 5.680	-2.205	0.032*

This table shows high significant increase in anxiety scores with long duration of the disease [P-value<0.001] and significant increase in depression scores with P-value =0.032

Table 27: Effect of compliance to treatment between patients on anxiety and depression

	Compliance			
	Negative	Positive	T-test	
	Mean ± SD	Mean ± SD	T	P-value
Anxiety	32.889 ± 2.759	20.373 ± 5.542	6.598	<0.001*
Depression	17.889 ± 4.833	8.490 ± 4.628	5.583	<0.001*

This table shows high significant increase in anxiety scores [P-value<0.001] and depression scores [P-value<0.001] among non-compliant patients.

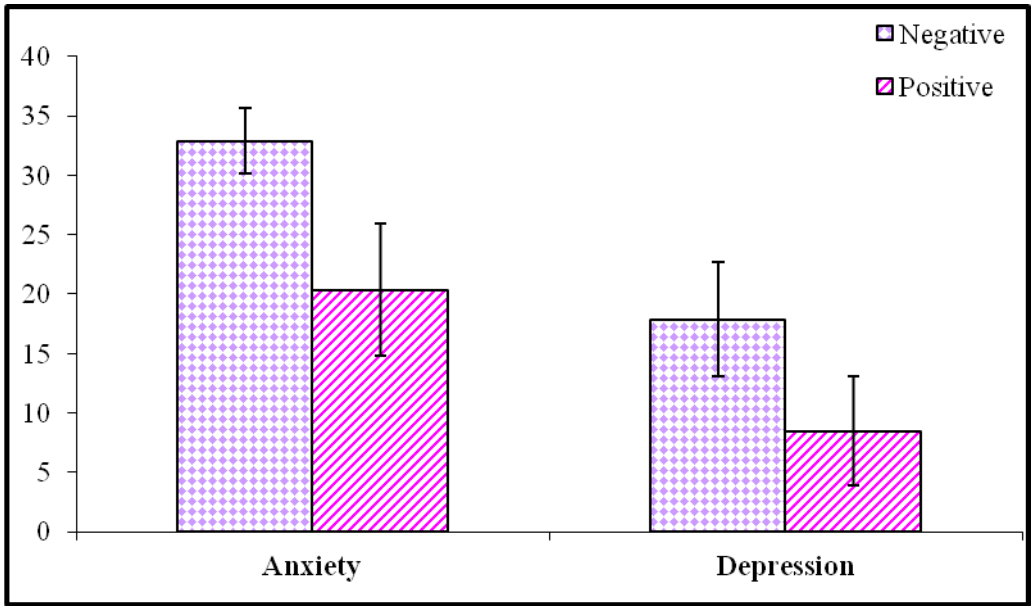

Fig.(7): Difference between compliant and non-compliant patients developing anxiety and depression.

Table 28: Relation between anxiety and depression in patients of different chronic diseases.

Groups	Anxiety		Depression					Chi-square	
			No	Mild	Moderate	Severe	Total	^{2} X	P-value
Asthma	Mild	N	8	0	0	0	8	26.154	<0.001*
		%	40%	0%	0%	0%	40%		
	Moderate	N	5	5	0	0	10		
		%	25%	25%	0%	0%	50%		
	Severe	N	0	0	2	0	2		
		%	0%	0%	10%	0%	10%		
Diabetes	Mild	N	8	1	0	0	9	4.306	0.366
		%	40%	5%	0%	0%	45%		
	Moderate	N	6	1	1	0	8		
		%	30%	5%	5%	0%	40%		
	Severe	N	1	1	1	0	3		
		%	5%	5%	5%	0%	15%		
Renal	Mild	N	1	4	0	0	5	12.963	0.050*
		%	5%	20%	0%	0%	25%		
	Moderate	N	3	6	1	0	10		
		%	15%	30%	5%	0%	50%		
	Severe	N	0	1	2	2	5		
		%	0%	5%	10%	10%	25%		

This table shows highly significant relation between anxiety and depression grades in asthmatic patients with P-value<0.001 and significant relation between anxiety and depression in patients on regular hemodialysis with P-value=0.050.

Table29: Comparison of PCS scores between patients in different chronic diseases.

	PCS		ANOVA	
	Range	Mean ± SD	f	P-value
Asthma	23.4 - 54.8	37.625 ± 11.001	5.741	0.005*
Diabetes	27.0 - 52.4	41.490 ± 7.999		
Renal	23.4 - 52.4	32.381 ± 5.786		

Significant difference between the three groups as regard PCS with P-value 0.005 with the lowest PCS scores in patients on regular haemodialysis.

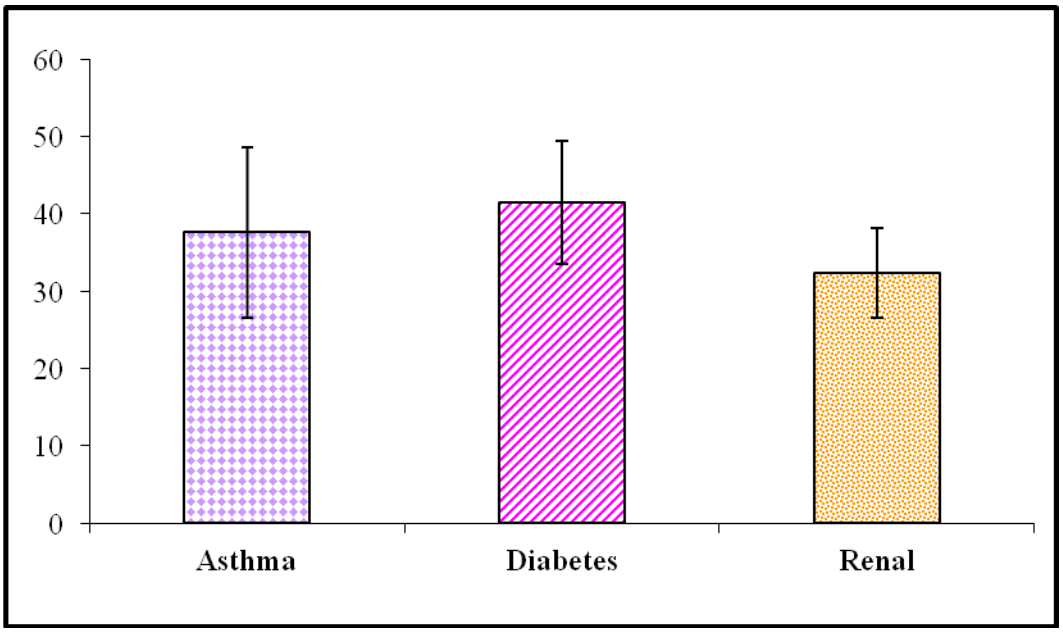

Fig. (8): Quality of Life (PCS) scores in different chronic diseases.

Table30: Comparison of MCS scores between patients in different chronic diseases.

	MCS		ANOVA	
	Range	Mean ± SD	f	P-value
Asthma	21.3 - 62.2	49.170 ± 13.489	15.352	<0.001*
Diabetes	26.4 - 60.8	46.530 ± 10.326		
Renal	19.3 - 53.1	31.635 ± 7.796		

Highly significant difference between the groups as regard MCS with P-value <0.001 with the lowest MCS scores are in patients on regular haemodialysis.

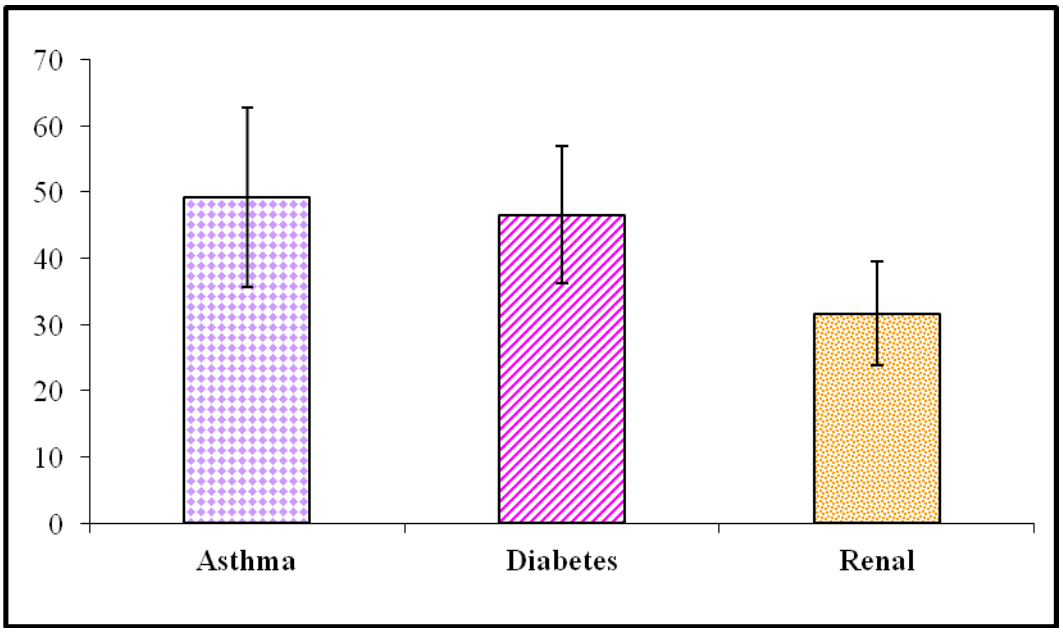

Fig. (9): Quality of Life (MCS) scores in different chronic diseases.

Table 31: Comparison of Quality of Life (PCS and MCS) between the different chronic diseased patients and control [as a whole] then individual comparison with[each other]:

		Range	Mean ± SD	ANOVA	
				F	P-value
PCS	Asthma	23.4 - 54.8	37.625 ± 11.001	42.448	<0.001*
	Diabetes	27 - 52.4	41.490 ± 7.999		
	Renal	23.7 - 41	32.381 ± 5.786		
	Control	55 - 61.5	57.525 ± 1.758		
P1	0.001*				
P2	0.002*				
P3	0.001*				
MCS	Asthma	21.3 - 62.2	49.170 ± 13.489	17.246	<0.001*
	Diabetes	26.4 - 60.8	46.530 ± 10.326		
	Renal	19.3 - 53.1	31.635 ± 7.796		
	Control	40.4 - 60.8	52.580 ± 6.798		
P1	0.051				
P2	0.022*				
P3	0.001*				

P1comparison between asthma & control
P2comparison between diabetes & control
P3comparison between renal & control

There is high significant decrease among patients in comparison to controls as regard to PCS and MCS (P-value<0.001). Individually, there is significant difference between all groups with control group in PCS and in MCS all groups except asthmatic patients.

Table 32: Scoring of anxiety, depression, PCS and MCS in patients of different chronic diseases within their disease duration.

		Range	Mean ± SD	ANOVA	
				f	P-value
Anxiety	Asthma	13 - 34	25.55 ± 4.568	2.639	0.042*
	Diabetes	7 - 39	21.45 ± 8.159		
	Renal	9 - 34	22.75 ± 6.965		
	Control	10 - 27	19.40 ± 5.041		
Depression	Asthma	1 - 18	8.45 ± 5.114	9.956	<0.001*
	Diabetes	1 - 18	7.60 ± 5.205		
	Renal	5 - 24	13.65 ± 5.092		
	Control	1 - 14	5.80 ± 3.473		
PCS	Asthma	23.4 - 54.8	37.625 ± 11.001	42.448	<0.001*
	Diabetes	27 - 52.4	41.490 ± 7.999		
	Renal	23.7 - 41	32.381 ± 5.786		
	Control	55 - 61.5	57.525 ± 1.758		
MCS	Asthma	21.3 - 62.2	49.170 ± 13.489	17.246	<0.001*
	Diabetes	26.4 - 60.8	46.530 ± 10.326		
	Renal	19.3 - 53.1	31.635 ± 7.796		
	Control	40.4 - 60.8	52.580 ± 6.798		
Duration	Asthma	3 - 9	6.025 ± 1.352	8.399	<0.001*
	Diabetes	1 - 8	3.875 ± 2.089		
	Renal	1 - 8	4 ± 2.052		
	Control	0 - 0	0 ± 0		

This table shows summary of psychiatric disorders (anxiety, depression) and Short Form-12 scoring through PCS and MCS within the duration of suffering from the different diseases, also in comparison with control group. There is significant difference between the four groups in depression, PCS, MCS and also their disease duration.

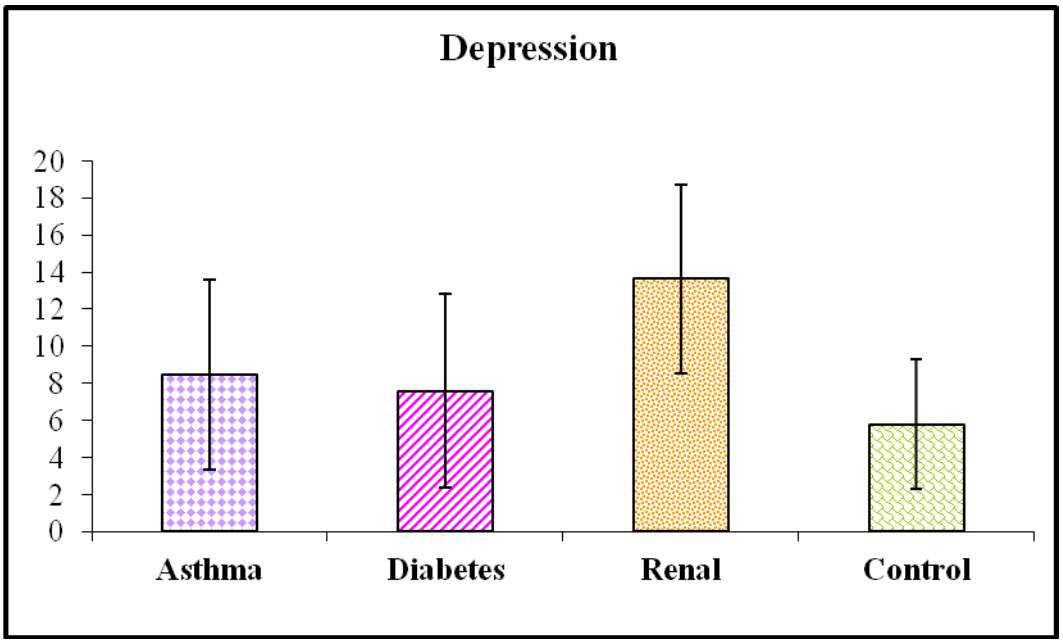

Fig. (10): Depression in different chronic diseases and control groups.

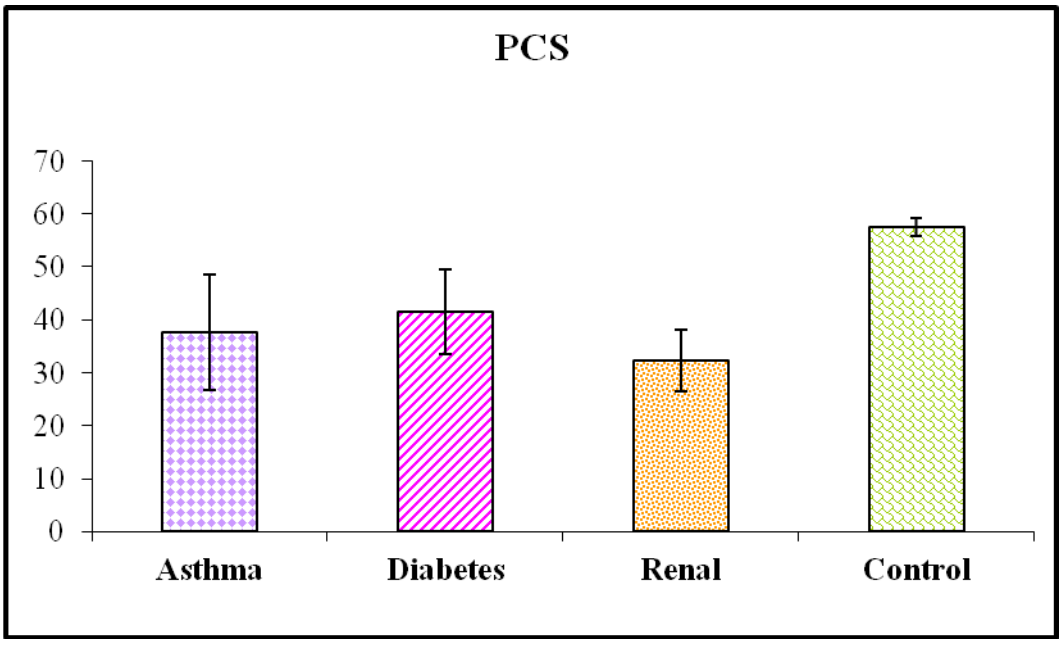

Fig. (11): PCS in different chronic diseases and control groups.

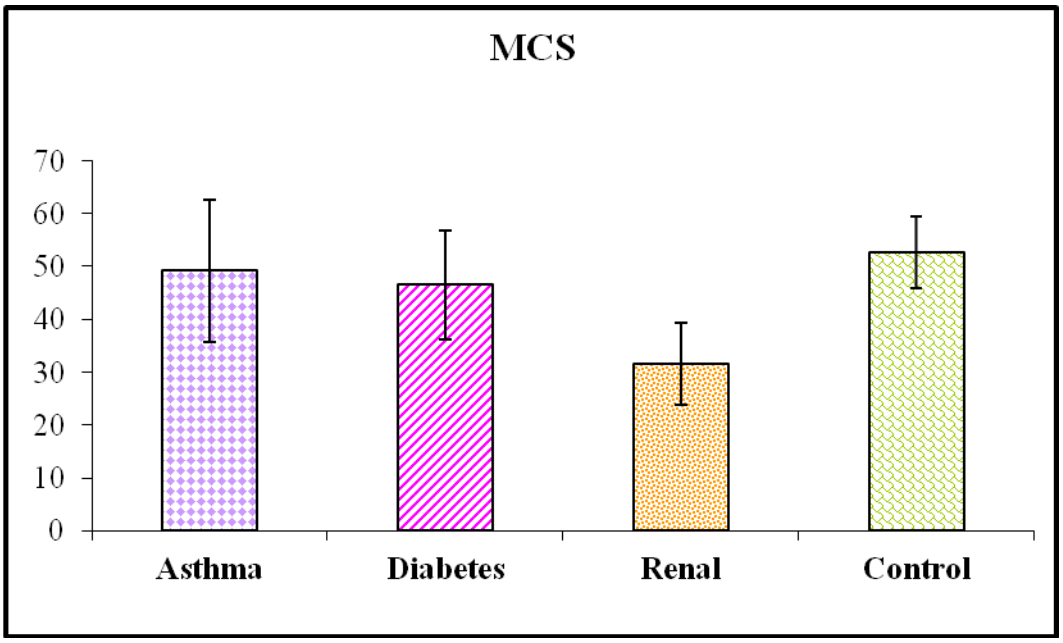

Fig. (12): MCS in different chronic diseases and control groups.

Table 33: Comparison of Quality of Life scores (PCS=Physical component summary and MCS=Mental component summary) between different groups as regard to sex.

		Sex			
		Male	Female	T-test	
		Mean ± SD	Mean ± SD	t	P-value
PCS	Asthma	35.717 ± 10.733	40.488 ± 11.482	0.948	0.356
	Diabetes	42.047 ± 7.258	39.820 ± 10.720	4.325	0.022*
	Renal	33.792 ± 5.756	29.759 ± 5.237	3.258	0.039*
	Control	57.188 ± 1.518	57.750 ± 1.932	0.691	0.498
MCS	Asthma	44.125 ± 14.277	56.738 ± 8.030	2.259	0.037*
	Diabetes	47.267 ± 9.769	44.320 ± 12.817	2.114	0.049*
	Renal	30.969 ± 8.675	32.871 ± 6.260	1.852	0.050*
	Control	55.088 ± 5.838	50.908 ± 7.107	1.378	0.185

There is significant difference between male and female patients (with lower scores in females=lower QOL) as regard to PCS in diabetic and patients on regular hemodialysis and as regard to MCS in patients of different chronic diseases.

Table 34: Effect of disease complications on quality of life scores.

	Groups	Complications			
		(-ve)	(+ve)	T-test	
		Mean ± SD	Mean ± SD	T	P-value
PCS	Asthma	39.122 ± 10.557	24.150 ± 1.061	5.365	0.001*
	Diabetes	44.060 ± 7.705	38.920 ± 7.812	2.963	0.019*
	Renal	26.950 ± 0.212	32.984 ± 5.793	2.107	0.024*
MCS	Asthma	51.994 ± 10.871	23.750 ± 3.465	3.576	0.002*
	Diabetes	47.710 ± 9.629	45.350 ± 11.370	0.501	0.623
	Renal	28.300 ± 0.141	32.006 ± 8.153	2.582	0.041*

There is significant decrease in PCS scores in different chronic diseases and in MCS in asthmatic and chronic renal patients with complications than those without complications.

Table 35:Correlation between age and Quality of Life scores of the patients then duration with QOL scores.

	Groups	PCS		MCS	
		r	P-value	r	P-value
Age	Asthma	-0.752	<0.001*	-0.527	0.017*
	Diabetes	0.331	0.154	-0.196	0.408
	Renal	-0.481	0.032*	-0.082	0.044*
Duration	Asthma	-0.463	0.027*	-0.398	0.019*
	Diabetes	0.348	0.133	0.232	0.324
	Renal	-0.159	0.502	0.023	0.923

This table shows significant negative correlation between age and quality of life scores (PCS and MCS) between asthmatic and chronic renal patients. According to the duration, there is significant negative correlation between duration, PCS and MCS scores in between asthmatic patients.

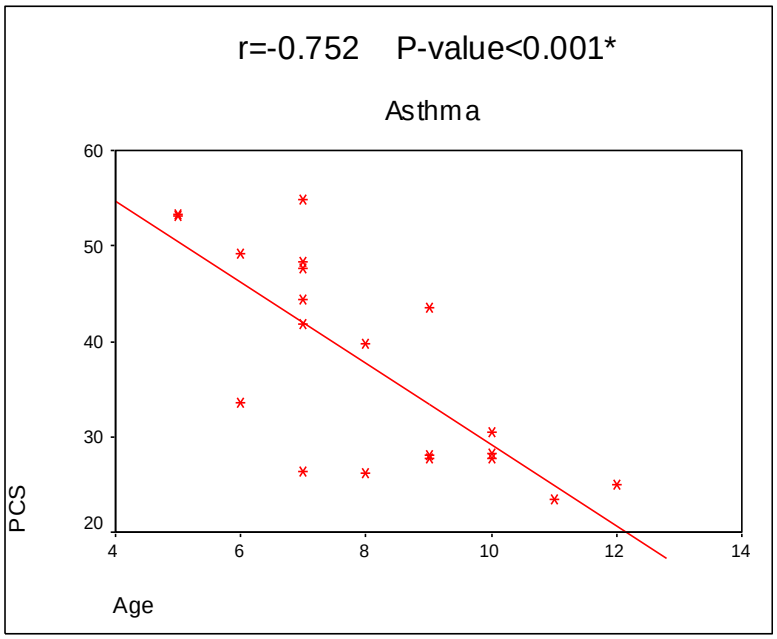

Fig. (13): Negative correlation between PCS and age in asthmatic patients.

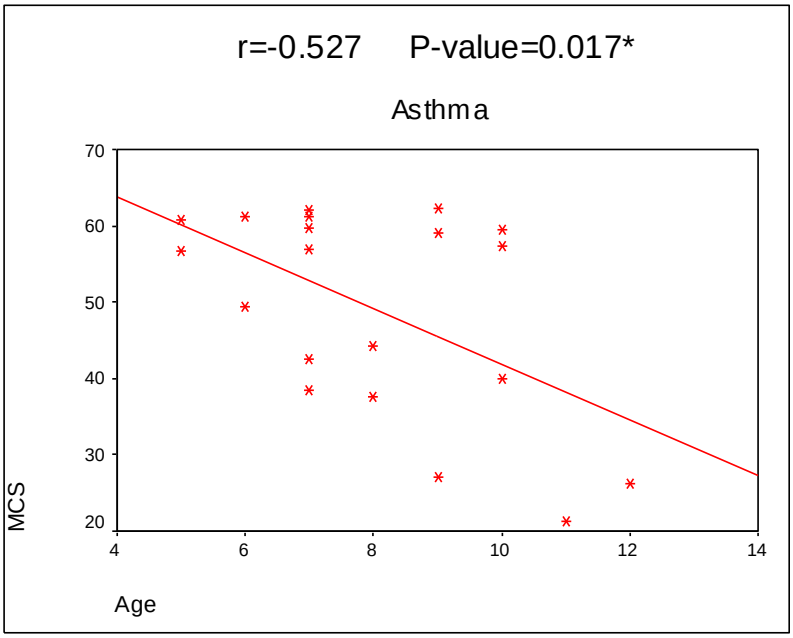

Fig. (14): Negative correlation between MCS and age of asthmatic patients.

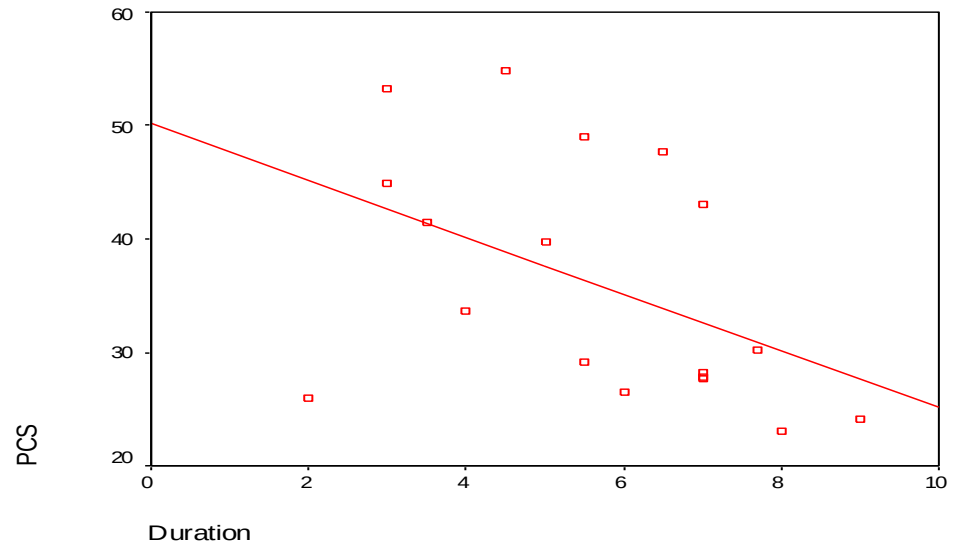

Fig. (15): Negative correlation between PCS and asthma duration.

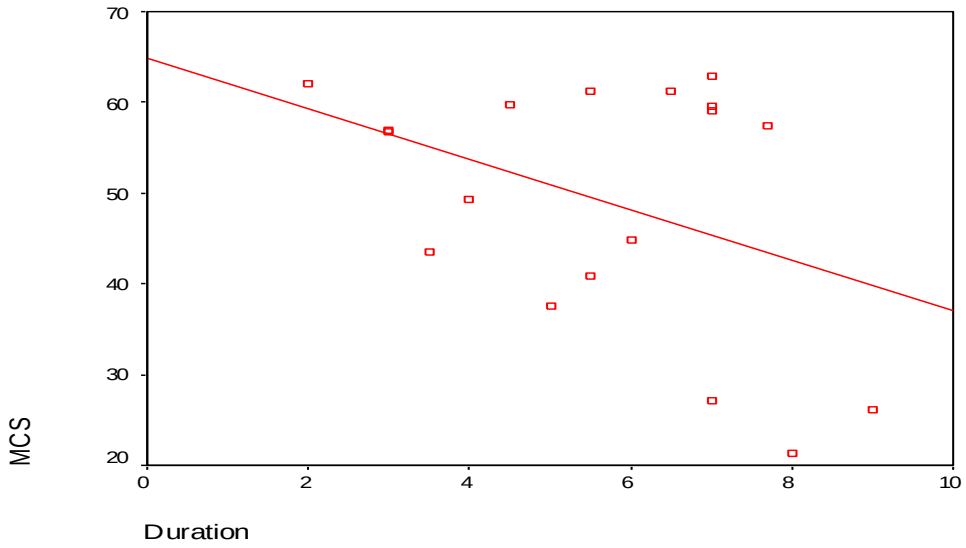

Fig. (16): Negative correlation between MCS and asthma duration.

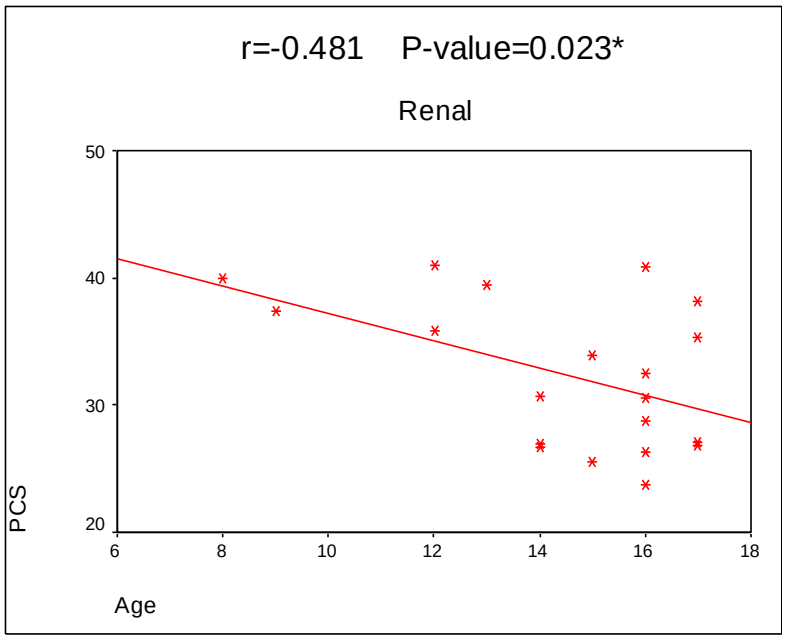

Fig. (17): Negative correlation between PCS and age in patients on regular hemodialysis.

Table 36: Relation between anxiety and PCS scores.

PCS	Anxiety	Range	Mean ± SD	ANOVA	
				f	P-value
Asthma	Mild	33.60 - 54.80	47.725 ± 7.050	15.044	<0.001*
	Moderate	26.20 - 44.30	32.240 ± 7.311		
	Severe	23.40 - 24.90	24.150 ± 1.061		
Diabetes	Mild	27 - 52.40	44.900 ± 7.823	1.646	0.222
	Moderate	29.10 - 51.70	39.188 ± 8.331		
	Severe	33.70 - 42.60	37.400 ± 4.636		
Renal	Mild	23.70 - 41	32.460 ± 7.731	4.528	0.022*
	Moderate	25.60 - 39.50	31.801 ± 5.013		
	Severe	26.80 - 40.90	33.460 ± 6.357		
Control	Mild	55.00 - 61.50	57.738 ± 1.869	0.534	0.474
	Moderate	55.30 - 60	57.129 ± 1.585		

This table shows highly significant relation between anxiety scores and mean values of PCS scores in between asthmatic patients with P-value <0.001 and significant relation in patients on regular hemodialysis with P-value=0.022. Lower PCS scores are associated with higher anxiety scores.

Table 37: Relation between anxiety and MCS scores.

MCS	Anxiety	Range	Mean ± SD	ANOVA	
				f	P-value
Asthma	Mild	42.50 - 62.10	56.675 ± 7.079	8.729	0.002*
	Moderate	27.10 - 62.20	48.250 ± 12.214		
	Severe	21.30 - 26.20	23.750 ± 3.465		
Diabetes	Mild	48.50 - 60.80	54.178 ± 5.044	17.652	<0.001*
	Moderate	31.50 - 53.70	44.013 ± 7.833		
	Severe	26.40 - 33.40	30.300 ± 3.568		
Renal	Mild	28.30 - 45.50	34.480 ± 7.711	2.638	0.028*
	Moderate	21.60 - 53.10	31.340 ± 8.564		
	Severe	19.30 - 36.80	29.380 ± 6.891		

This table shows highly significant relation between anxiety scores and mean values of MCS scores in diabetic patients with P-value <0.001 and significant difference in asthmatic patients [P-value=0.002] and ESRD patients [P-value=0.028]. Lower MCS scores are associated with higher anxiety scores.

Table 38: Relation between depression and PCS scores.

PCS	Depression	Range	Mean ± SD	ANOVA	
				f	P-value
Asthma	No	26.20 - 54.80	42.031 ± 10.458	4.530	0.026*
	Mild	27.70 - 43.60	31.560 ± 6.827		
	Moderate	23.40 - 24.90	24.150 ± 1.061		
Diabetes	No	27 - 52.40	42.627 ± 8.069	0.713	0.504
	Mild	33.70 - 48.30	39.567 ± 7.711		
	Moderate	29.10 - 42.60	35.850 ± 9.546		
Renal	No	26.90 - 35.30	31.100 ± 5.940	2.253	0.042*
	Mild	26.80 - 40.90	33.400 ± 7.093		
	Moderate	25.60 - 41	33.655 ± 6.027		
	Severe	23.70 - 33.90	28.750 ± 4.473		
Control	No	55 - 61.50	57.644 ± 1.774	0.824	0.376
	Mild	55.30 - 57.60	56.450 ± 1.626		

This table shows significant relation between depression scores and mean values of PCS scores in between asthmatic [P-value=0.026] and ESRD patients [P-value=0.042]. Lower PCS scores are associated with higher depression scores.

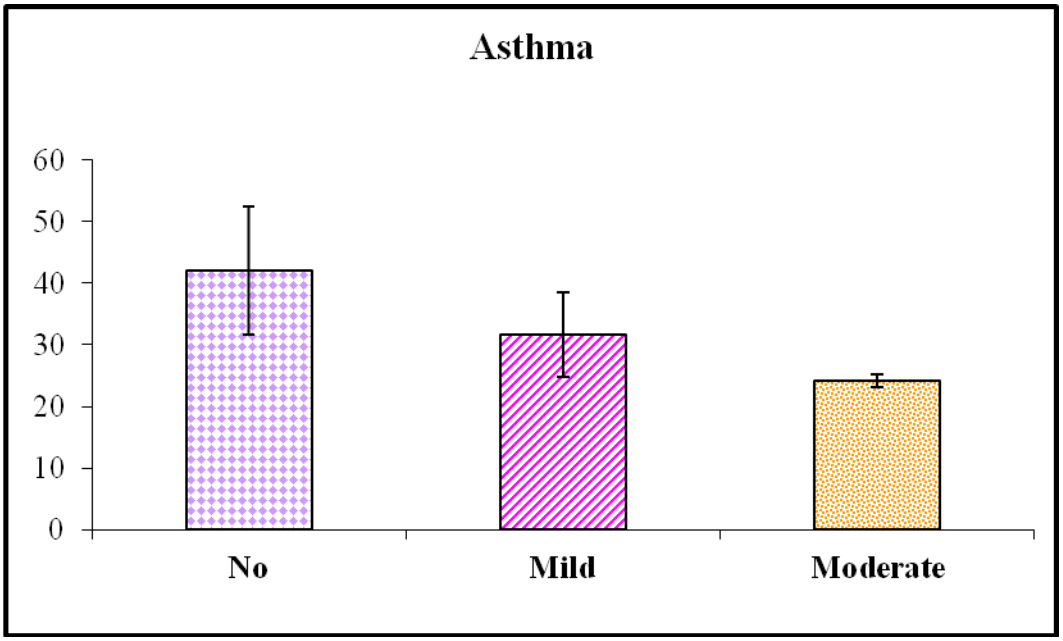

Fig. (18): Relation between PCS and depression in asthmatic patients.

Table 39: Relation between depression and MCS scores.

MCS	Depression	Range	Mean ± SD	ANOVA	
				f	P-value
Asthma	No	37.50 - 62.10	53.054 ± 9.314	6.427	0.008*
	Mild	27.10 - 62.20	49.240 ± 15.128		
	Moderate	21.30 - 26.20	23.750 ± 3.465		
Diabetes	No	33.40 - 60.80	50.500 ± 7.289	8.515	0.003*
	Mild	31.10 - 50.30	37.633 ± 10.971		
	Moderate	26.40 - 33.80	30.100 ± 5.233		
Renal	No	29 - 53.10	39.500 ± 11.748	2.996	0.049*
	Mild	21.60 - 39.60	30.082 ± 4.668		
	Moderate	24.70 - 34.80	29.233 ± 5.129		
	Severe	19.30 - 36.80	28.050 ± 12.374		
Control	No	40.40 - 60.80	53.539 ± 6.400	4.181	0.056
	Mild	41.10 - 46.80	43.950 ± 4.031		

This table shows significant relation between depression scores and mean values of MCS scores in between different chronic patients [P-value =0.008 in asthma, =0.003 in diabetes, =0.049 inESRD]. Lower MCS scores are associated with higher depression scores.

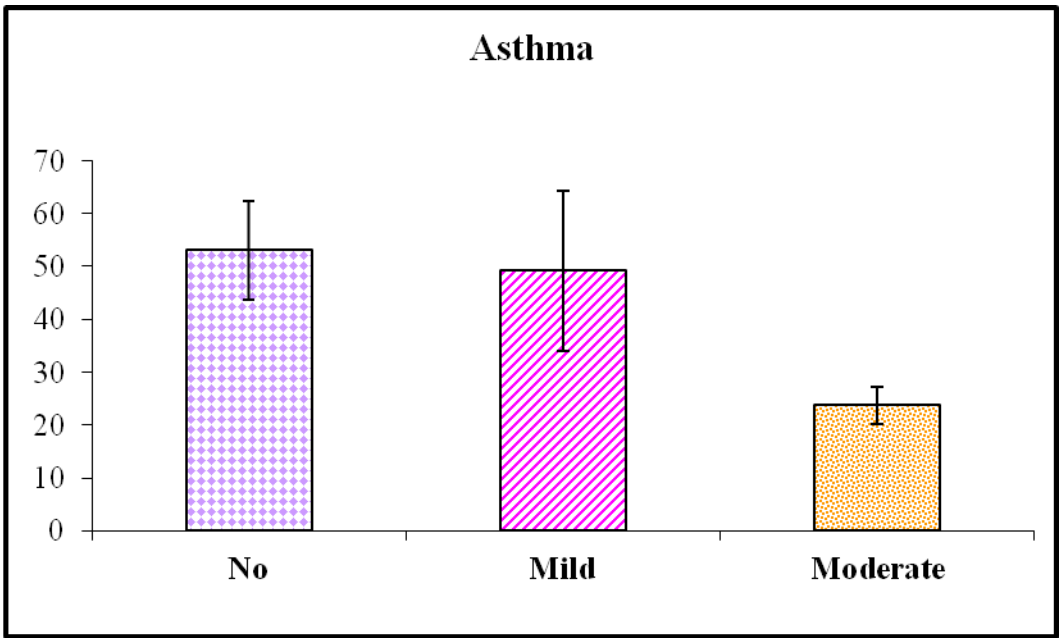

Fig. (19): Relation between MCS and depression in asthmatic patients.

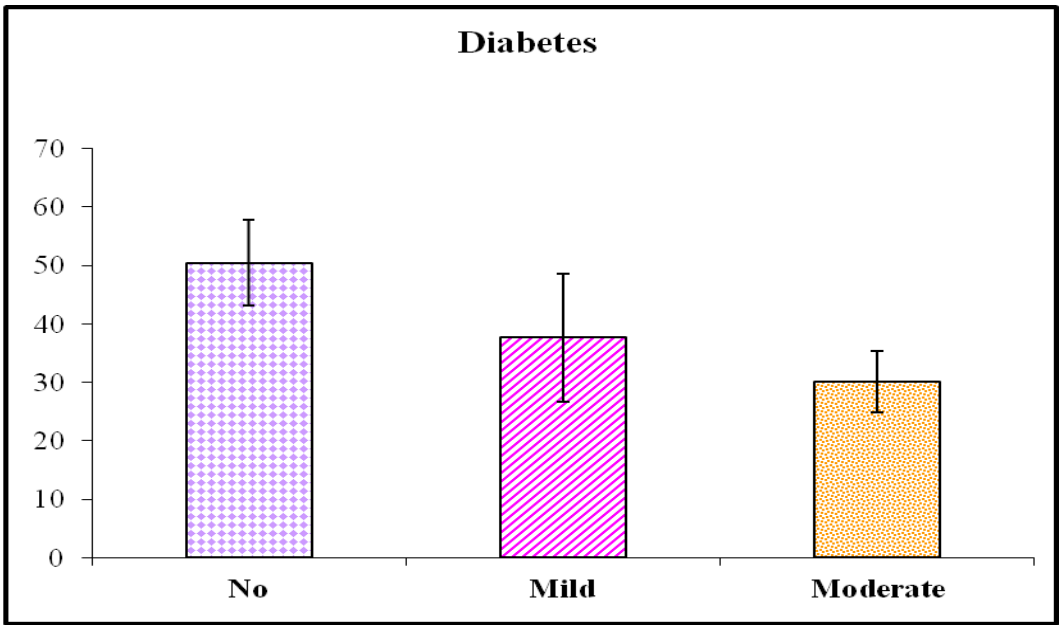

Fig. (20): Relation between MCS and depression in diabetic patients.

Table 40: Incidence of other psychological morbidities in the studied cases.

	Asthma		Diabetes		Renal		Chi-square	
	N	%	N	%	N	%	X^2	P-value
Low self esteem	5	25	5	25	11	55	6.328	0.028*
Social isolation	5	25	6	30	4	20	0.533	0.766
Aggression	2	10	2	10	1	5	0.436	0.804
Sleep disorders	8	40	6	30	14	70	6.964	0.031*
Thinking of Suicide	0	0	1	5	4	20	5.993	0.049*

Patients on regular hemodialysis have the upper hand in suffering from low self esteem in 11 patients (55%), sleep disorders with significant difference in 14 patients (70%) and thinking of suicide in 4 patients (20%) with significant difference from other diseases, social isolation in 4(20%) patients and aggression in 1(5%)patient.

In diabetes, low self esteem in 5(25%) patients, sleep disorders in 6(30%) patients, social isolation in 6(30%) patients, aggression in 2(10%) patients and thinking of suicide in one patient.

In asthma, low self esteem in 5(25%) patients, sleep disorders in 8(40%) patients, social isolation in 5(25%) patients and aggression in 2(10%) patients.