

ORIGINAL ARTICLE

Effect of Age and Gender on Quality of Life in patients of Obstructive Jaundice

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ABSTRACT

Aim: Effect of age and gender on quality of life in patients of obstructive jaundice.**Methodology:** This was a case control study conducted in OPD of General Surgery, Unit-1, Civil Hospital, Karachi. It is non-probability, consecutive sampling technique. The sample size was 195 subjects. 87 patients had an age between 18-60 years whereas 108 patients had >60 years of age. Either gender was included. QoL was measured by using SF-36 based on 8 domains. Data were analyzed through SPSS version-21**Results:** Significant effect of age in obstructive jaundice patients on their QOL ($p < 0.01$) where patients aged from 18 to 60 years had significantly higher SF-36 quality of life scores, both overall and in all eight individual domains than patients aged >60 years. Gender of the obstructive jaundice patients did not have a significant effect on their QOL, though the female patients had higher SF-36 quality of life scores, both overall and in all eight individual domains.**Conclusion:** Quality of life of obstructive jaundice patients were more improved with the age between 20-60 years than age >60 years, whereas gender had no significant impact on the quality of life.**Keywords:** Obstructive jaundice, age, gender, quality of life

INTRODUCTION

Benign and malignant conditions are main causes of obstructive jaundice. Malignancies like cholangiocarcinoma, gallbladder carcinoma, hepatocellular carcinoma, pancreatic cancer, ampullary carcinoma and metastatic tumors are included with uninterrupted compression of the common bile duct¹. Gall stone bring about biliary obstruction in about 5 in 1000 people².

The objective of the study was to find out effect of age and gender on quality of life in patients of obstructive jaundice.

METHODOLOGY

It is a case control study conducted in OPD of General surgery, Unit-1, Civil Hospital, Karachi. Non-probability, consecutive sampling technique is used after approval of Institutional Ethical Committee. The study was started by getting approval from ethical review committee. 195 subjects with ages 20-80 years were included. 87 patients having age 18-60 years while 108 patients with age >60 years with obstructive jaundice underwent biliary patenting were selected. Quality of Life (QoL) was evaluated using Short Form 36 and based on 8 domains. Data was entered into SPSS version-21.

RESULTS

Table 1: Age and Quality of Life

Quality of Life	Age		Mann-Whitney U test/p-value
	18 to 60 yrs	More than 60 yrs	
N	87	108	-
Physical function (PF)			
Mean± SD	60.91±15.92	48.06±14.81	<0.01*
Median[IQR]	63.1[73.72-49.89]	47.17[58.23-36.34]	
Max – Min	94.27-25.45	86.23-25.3	
Role-physical (RP)			
Mean± SD	61.77±16.27	48.95±16.1	<0.01*
Median[IQR]	65.44[76.36-48.45]	46.66[59.74-37.09]	
Max – Min	88.92-25.29	89.18-25.42	
Body pain (BP)			
Mean± SD	68.82±14.48	53.4±16.64	<0.01*
Media [IQR]	70.09[80.17-56.6]	50.12[63.08-41.9]	
Max – Min	93.39-36.41	90.45-25.18	
General health (GH)			
Mean± SD	53.86±12.46	44.03±12.51	<0.01*
Median[IQR]	53.57[62.01-45.13]	42.27[52.73-33.6]	

Max – Min	87.01-26.29	78.88-25.59	
Vitality (VT)			
Mean± SD	61.02±15.17	47.25±15.15	<0.01*
Median[IQR]	60.79[72.1-49.96]	44.9[56.12-37.27]	
Max – Min	94.44-26.21	94.07-25.15	
Social function (SF)			
Mean± SD	69.37±13.73	54.16±14.97	<0.01*
Median[IQR]	69.97[78.9-60.13]	54.9[63.78-40.7]	
Max – Min	93.41-35.55	85.92-27.27	
Role emotional (RE)			
Mean± SD	67.58±16.05	50.95±16.32	<0.01*
Median[IQR]	71.49[78.88-58.36]	48.64[60.62-38.57]	
Max – Min	91.51-25.31	93.54-26.46	
Mental health (MH)			
Mean± SD	58.8±14.89	46.1±13.83	<0.01
Median[IQR]	58.87[67.45-45.67]	42.16[54.14-35.45]	
Max – Min	94.66	88.95-25.08	
Total SF-36-QoL Score			
Mean± SD	62.77±11.76	49.11±9.4	<0.01*
Median[IQR]	61.36[69.94-54.75]	50.45[56.78-43.19]	
Max – Min	92.2-35.32	64.11-26.32	

Table 2: Gender and Quality of Life

Quality of Life	Gender		Mann-Whitney test, p-value	U
	Female	Male		
N	97	98	-	
Physical function (PF)				
Mean± SD	54.1±15.83	53.48±17.37	0.794	
Median [IQR]	52.74[65.16-41.49]	53.08[66.75-38.28]		
Max – Min	94.27-25.45	86.11-25.3		
Role-physical (RP)				
Mean± SD	55.66±17.26	53.69±17.48	0.428	
Median [IQR]	55.07[69.71-41.46]	52.97[66.59-37.98]		
Max – Min	88.92-25.42	89.18-25.29		
Body pain (BP)				
Mean± SD	60.4±16.86	60.16±18.11	0.926	
Median [IQR]	58.76[74.94-47.4]	60.36[74.56-43.94]		
Max – Min	93.39-25.18	91.63-25.24		
General health (GH)				
Mean± SD	49.55±13.13	47.3±13.6	0.240	
Median [IQR]	48.52[57.95-38.76]	46.47[56.83-34.31]		
Max – Min	87.01-25.59	77.8-25.88		
Vitality (VT)				
Mean± SD	53.53±15.23	53.26±17.94	0.912	
Median [IQR]	52.34[64.45-42.57]	52.11[65.49-39.51]		
Max – Min	94.44-25.15	94.07-25.26		
Social function (SF)				
Mean± SD	62.65±15.39	59.26±17	0.146	
Median [IQR]	61.78[73.88-52.75]	61.54[71.68-46.19]		
Max – Min	93.41-27.27	91.61-27.87		
Role emotional (RE)				

Mean± SD	60.87±17.08	55.89±18.93	0.055
Median [IQR]	60.5[76.16-46.67]	56.27[72.38-40.03]	
Max – Min	91.51-26.79	93.54-25.31	
Mental health (MH)			
Mean± SD	52.81±15.88	50.73±15.37	0.354
Median [IQR]	51.91[62.48-39.62]	51.76[59.92-38.38]	
Max – Min	94.66-25.08	93.74-25.24	
Total SF-36-QoL Score			
Mean± SD	56.2±12.33	54.22±12.66	0.271
Median [IQR]	55.93[61.82-49.01]	54.64[60.62-47.19]	
Max – Min	92.2-26.32	88.83-26.99	

DISCUSSION

In one study, age was between 29 to 70 years while causes of malignancy were common in the adults and mostly seen in the patients >50 years of age.³ With the increasing age, the increased prevalence of malignant obstructive jaundice has also been revealed.⁴ The benign and malignant obstructive jaundice have been observed mostly in females as compared to males. The M:F ratio for benign jaundice was 1:1.3, however, in malignant obstructive Jaundice; the ratio was 1:1.2. The prevalence of obstructive jaundice in females was found to be higher as gall stones were often found in them.⁵

In our study, the mean age was 55.9 ± 15.4 years in which 87 (44.6%) of them were 18 to 60 years of age while 108 (55.4%) of them were >60 years of age and that was not consistent with the above mentioned studies. Regarding gender, 98 (50.3%) of them were males while 97 (49.7%) were females indicating 1:1 ratio but also not showing consistency with the above research.

In another study, the score of RE significantly improved in ERCP with radiotherapy or chemotherapy group after ERCP, which shows that such patients had a better emotion and an optimistic attitude towards their life.⁶

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In our study, there was a highly significant difference ($p<0.01^*$) in the scores for all domains measured with SF-36 with respect to age showing more improvement in quality of life in age between 18-60 years than >60 years while non significant difference ($p=0.271$) was found in the scores for all 8 domains measured with SF-36 with respect to gender.

CONCLUSION

Prevalence of obstructive jaundice was observed equally in both the genders while quality of life was improved in patients with age between 20-60 years than >60 years of age. Gender had no significant impact on the quality of life.

Conflict of interest: Nil

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