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Assessment of Health Related Quality of Life among Patients Undergoing Hemodialysis: A Cross-Sectional Study

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Abstract

Background: Hemodialysis is a life-sustaining treatment for patients with end-stage renal disease. Quality of life is the perceived quality of an individual's daily life and hemodialysis may affect the health-related quality of life and outcomes among patients with ESRD. The present study aims to assess the health related quality of life among patients undergoing hemodialysis.

Materials and Methods: A hospital based cross-sectional study was conducted among 372 subjects aged 18 year or more with CKD undergoing hemodialysis at a tertiary healthcare sector of Agartala for a duration of 6 months.

Results: The study revealed that majority (43%) of the participants was dissatisfied with their health and had overall low QOL scores: Environmental domain (52.30 ± 14.880), psychological domain (33.07 ± 12.899), social domain (53.11 ± 18.699), and physical domain (43.86 ± 13.416). Using WHOQOL-BREF questionnaire we observed that the various demographic factors were significant (P<0.05) positive and negative predictors of one or more dimensions of the WHOQOL-BREF.

Conclusion: There is a need to conduct health care awareness among Patients undergoing hemodialysis to focus on health conditions and services available to them.

Keywords: Health-related Quality of life (HRQOL); Haemodialysis (HD); Chronic kidney disease (CKD); Agartala

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Introduction

Chronic Kidney Disease (CKD) is a type of kidney disease in which there is gradual loss of kidney function over a period of months or years [1]. Hemodialysis (HD) is a life-sustaining treatment for patients with End-Stage Renal Disease (ESRD) [2]. Quality of Life (QOL) is the perceived quality of an individual's daily life, that is, an assessment of their well-being or lack thereof. This includes all emotional, social and physical aspects of the individual's life. In health care, Health-Related Quality of Life (HRQOL) is an assessment of how the individual's well-being may be affected over time by a disease, disability or disorder [3]. 10% of the population worldwide is affected by Chronic Kidney Disease (CKD), and millions die each year because they do not have access to affordable treatment [4]. Estimates put the number of patients on dialysis in India currently at about 100,000. India's demand for dialysis is growing at a rate of 31%, compared to 6% in the US and 8% in the rest of the world [5]. However, to the best of our knowledge, only a few studies have been conducted to assess the QOL of patients with CKD in India. Hence, the study was conducted with the objective to assess the health related quality of life among patients undergoing hemodialysis.

Materials and Methods

A hospital based cross-sectional study was conducted among 372 Subjects aged 18 year or more with CKD undergoing hemodialysis at a tertiary healthcare sector of Agartala for a duration of 6 months. Adults aged 18 years or more with CKD and had been on regular hemodialysis for at least 3 months were included in the study. Those who were not willing to participate in the study, patients with cognitive impairment and coexisting diseases such as stroke, chronic obstructive pulmonary diseases, heart diseases, and chronic liver diseases and those who may be considered mentally unfit to make any valid statement were excluded from the study. The sample size of 372 subjects was calculated using the formula: $N = Z_{(1-\alpha/2)}^{2} \times P\ Q/L^{2}$ after considering Proportion (p) of hemodialysis

patients with poor quality of life as per WHO BREF scale = 0.50812 and relative precision of 10% of p i.e. 0.0508. Sampling was done using census. There are 4 shifts of dialysis going on in each day in this hospital. We collected data in week days only (Monday to Saturday). On first day we collected data from morning shift, on second day we collected data from afternoon shift, on third day we collected data from evening shift and on fourth day we collected data from night shift from all the patients undergoing hemodialysis in that particular shift according to the day and inclusion criteria. Like this way we continued our data collection till the desired sample size is attained. A pre designed and pre tested interview schedule and WHOQOL-BREF questionnaire was used for data collection. Subjects were approached individually and explained about the objectives of the study. Written informed consent was obtained from the selected patients for participation in this study at first. Then study participant was interviewed using a predesigned, pretested questionnaire to collect data regarding information on socio-demographic profile and quality of life. Data was presented with the help of text, tables, charts etc. Chi-square test for testing the significance of difference between two or more proportions and student *t* – test for testing the significance of difference between two means was used and p-value <0.05 was considered statistically significant. The study was conducted after obtaining permission from the IEC of Agartala Govt. Medical College & GBP Hospital.

Results

Socio-demographic profile

A total of 372 respondents were included in this study. Their mean age was 51.96 years (SD=12.52 years) and median age was 53 years with inter-quartile range from 43 to 62 years. Mean per capita income was Rs 3182.99 (SD=3099.16). Majority (43%) of the participants were dissatisfied with their health and majority (40.3%) of the participants rated their quality of life as poor. Table 1 shows that majority of the participants were in the age group of >34 to 60 years (64.5%), 79.3% participants were males, 58.1% were residing in rural area. Majority of the participants were Hindu (92%), 90.3% participants were married. Majority (76.3%) belonged to nuclear family. Majority (66%) of the participants were belonged to General Category. 32.5% of the study participants were educated up to secondary education. Majority of the participants (30.90%) were and. 32% of the participant's belonged to lower class of Socio-Economic Status (B.G. Prasad Scale).

QOL scores and correlations among various domains of WHOQOL-BREF

The following QOL scores for various domains were obtained: Environmental domain (52.30 ± 14.880), psychological domain (33.07 ± 12.899), social domain (53.11 ± 18.699), and physical domain (43.86 ± 13.416). There were statistically significant correlations among all domains (p<0.05 in all cases) except between environmental domain with social domain. There were also statistically significant correlations between overall perception of QOL and general health and scores obtained from different domains (p<0.05 in all cases). Using one SD below the mean as the cut-off standards for poor QOL, 28%% of the respondents were considered to have poor QOL in the General Health (Q2), followed by psychological domain (26.1%), Social domain (26.1%), general QOL (Q1) to be (18.8%), environmental domain (16.1%), physical domain (6.5%) (Table 2).

Socio-demographic characteristics and QOL scores

Table 3 shows that relationship between demographic characteristics and the domain scores. A statistically significant difference was observed between the scores of various domains and age groups (p<0.05). Patients in the age group of ≥ 60 years had higher QOL scores in their Environmental domain (56.76 ± 10.675) than patients in other age groups followed by patients in the age group of >34 to 60 years had higher QOL in the physical domain (45.52 ± 12.490), psychological domain (35.21 ± 14.074), social domain (57.05 ± 14.203) than patients in other age groups. A statistically significant difference was observed between the scores of various domains and sex of the participants (p<0.05). Males were having higher QOL in all the Physical domains (45.93 ± 13.820), psychological domain (34.62 ± 13.189), social domain (54.55 ± 18.273), environmental domain (53.63 ± 15.221) as compared to females. A statistically significant difference was also observed between the scores of various domains and caste, religion, marital status and type of family of the participants (p<0.05). ST had higher QOL in Social domain (57.88 ± 14.725) than other

Table 1: Characteristics of Study Population (n=372).

Characteristics		Frequency (N)	Percent (%)
Age	18-34	36	9.7
	>34-60	240	64.5
	>60	96	25.8
Sex	Male	295	79.3
	Female	77	20.7
Residence	Urban	156	41.9
	Rural	216	58.1
Religion	Hindu	342	92
	Muslim	15	4
	Christian	15	4
Marital Status	Married	336	90.3
	Unmarried	14	3.8
	Widow	22	5.9
Type of Family	Nuclear	284	76.3
	Joint	88	23.7
Caste	SC	39	10.5
	ST	34	9.1
	OBC	53	14.2
	GEN	246	66.1
Educational Status	Illiterate	52	14
	Primary Education	117	31.5
	Secondary Education	121	32.5
	Graduate And Above	82	22
Occupation	Unemployed	115	30.9
	Unskilled Worker	24	6.5
	Businessman	83	22.3
	Service Holder	52	14
	Housewife	69	18.5
	Retired	29	7.8
Socio-Economic Status	Upper Class	60	16.1
	Upper Middle Class	54	14.5
	Middle Class	37	9.9
	Lower Middle Class	101	27.2
	Lower Class	120	32.3

Table 2: Scores of the 4 QOL domains, overall QOL (Q1) and general health (Q2) and their spearman's correlations (N=372).

	Mean	SD	Number of participants with poor scores[a], n (%)	Q1	Q2	Environmental QOL	Social Relationships QOL	Psychological QOL	Physical QOL
				Spearman's correlations (r)					
Physical Domain	43.86	13.416	6.50%	0.700**	0.666**	0.484**	.303**	0.680**	
Psychological Domain	33.07	12.899	26.10%	0.761**	0.633**	0.289**	.559**		0.680**
Social Domain	53.11	18.699	21.80%	0.388**	0.633**	-0.026		0.559**	0.303**
Environmental Domain	52.3	14.88	16.10%	0.525**	0.340**		-0.026	0.289**	0.484**
Q1	2.48	1.073	18.80%		0.741**	0.525**	0.388**	0.761**	0.700**
Q2	2.02	0.797	28.00%	0.741**		0.340**	0.633**	0.633**	0.666**

[a]scores <1SD
**P<0.01

Caste and General had higher QOL in Environmental domain (54.76 ± 13.543) than other Caste. Christian had better QOL in psychological domain (34.73 ± 3.615) and Social domain (64.87 ± 9.812) and Muslim had better QOL in environmental domain (64.87 ± 9.812) in comparison to other religions. Married had significantly higher QOL in Physical domain (45.03 ± 13.392), psychological domain (34.33 ± 12.804), and environmental domain (52.80 ± 15.275) in comparison to other marital status. Nuclear family had higher QOL in psychological domain (35.42 ± 11.813), social domain (56.57 ± 16.725) and joint family had higher QOL in environmental domain (56.33 ± 9.437) in comparison to each other. Employment status and educational status and socio-economic status and residence (except in social domain) also influenced the QOL. There was a significant difference between QOL scores in physical domain (P<0.001), psychological domain (P<0.001), Social domain (P<0.001) and environmental domain (P<0.001) of hemodialysis patients with different employment status and educational status and socio-economic status and residence. We observed statistically significant difference among overall perception of general health (Q2), general QOL (Q1) with age, sex, residence, marital status, religion, employment status, educational status and socio-economic status (P<0.05). Nuclear family had significantly higher score (2.07 ± 0.794) in overall perception of general health than joint family (P<0.05).

Table 4 we used a linear regression model to determine the strongest predictors of QOL. After fitting the various demographic factors into the linear regression model, we observed that the various demographic factors were significant (P<0.05) positive and negative predictors of one or more dimensions of the WHOQOL-BREF. Age was significant positive predictor of environmental domain and negative predictor of psychological domain, social domain, Q1, Q2. Type of family was significant positive predictor of environmental domain and negative predictor of psychological domain, social domain. Caste was significant positive predictor of Q2, social domain. Sex was significant negative predictor of physical domain, psychological domain, Q2. Residence was significant negative predictor of physical domain, psychological domain, Q1, Q2. Religion was significant positive predictor of environmental domain, Q2. Marital status was significant negative predictor of physical domain, psychological domain, social domain, Q1, Q2. Educational status was significant positive predictor of Q1, environmental domain and negative predictor of psychological domain, social domain, Q2. Occupation was significant positive predictor of Q2, psychological domain, environmental domain, social domain. SE class was significant negative predictor of physical domain, psychological domain, social domain, Q1, Q2.

Discussion

In this study, we assessed the Health Related Quality of Life among patients undergoing hemodialysis. A cross-sectional hospital based study was conducted in a tertiary healthcare sector of Agartala for 6 months among subjects aged 18 year or more with CKD undergoing hemodialysis with mean age of participants of 51.96 + 12.52 years and maximum participants lying within the age group of ≥ 34 to 60 years. Majority of the participants were males (79.3%) and studied up to secondary level of education (32.50%) [6]. Joshi Utsav et al.[7] reported that mean age of the participants was 45.48 ± 15.31 years and majority of the participants were males (64.1%) and educated up to primary education (31.2%). Zyoud et al. [8] reported mean age was 53.3 ± 16.2 years and majority (52.1 %) was males. In this study we found that mean score of overall satisfaction with their health (Q1), how do they rate their quality of life (Q2) and other domains were Q1 (2.48 ± 1.07), Q2 (2.02 ± 0.79), environmental domain (52.30 ± 14.880), psychological domain (33.07 ± 12.899), social domain (53.11 ± 18.699), and physical domain (43.86 ± 13.416). Nayana et al. [9] found that the mean score of kidney disease component summary was high than Mental Component Summary and Physical Component Summary (60.48 ± 11.81, 41.83 ± 15.78 and 36.4 ± 16.30 respectively) in their study.

Thenmozhi [10] found that the mean total score was 48.73 ± 22.65; the highest score was for dialysis staff encouragement scale (84.04 ± 14.89) followed by social support scale (80.38 ± 20.38) and quality of social interaction (71.52 ± 18.74). Zyoud et al. [8] found that mean among ESRD patients undergoing HD were physical domain (0.704 ± 0.199), psychological domain (0.75 ± 0.17), social domain (0.65 ± 0.23) and environmental domain (0.60 ± 0.21) respectively [10]. Some of these variations in HRQOL scores could be explained by differences in the main socio-demographic and clinical characteristics of recruited participants such as; age, sex and presence of chronic illnesses.

Our findings indicate that older patients had significantly better QOL than younger patients in the social domains. Joshi Utsav et al. [7] also found social aspects to be better in older patients than younger patients. This could be attributed to the fact that older people may have a better understanding of the limitations of social life and so may be more satisfied with life despite the presence of the disease. Moreover, younger patients identify disease as a challenge and a loss, whereas older individuals regard it as less challenging and a part of life. Although employed individuals in this study scored better in every domain of QOL than those who were unemployed, the results were statistically significant for all the domains and overall perception

Table 3: Comparison of WHOQOL-BREF domain mean scores, standard deviations, and significance based on Socio-Demographic variables:

Variable		Physical Domain	Psychological Domain	Social Domain	Environmental Domain	Q1	Q2
Age	18-34	32.92 ± 8.57	28.67 ± 2.966	49.78 ± 28.785	40.28 ± 11.661	1.83 ± 0.775	1.83 ± 0.775
	>34-60	45.52 ± 12.49	35.21 ± 14.074	57.05 ± 14.203	52.32 ± 15.771	2.70 ± 1.035	2.11 ± 0.803
	>60	43.80 ± 15.2	29.38 ± 10.747	44.52 ± 20.851	56.76 ± 10.675	2.17 ± 1.092	1.86 ± 0.763
	P	0	0	0	0	0	0.012
Sex	Male	45.93 ± 13.82	34.62 ± 13.189	54.55 ± 18.273	53.63 ± 15.221	2.56 ± 1.07	2.12 ± 0.808
	Female	35.91 ± 7.683	27.16 ± 9.725	47.60 ± 19.402	47.21 ± 12.31	2.19 ± 1.039	1.66 ± 0.641
	P	0	0	0.005	0.001	0.008	0
Residence	Urban	47.24 ± 14.407	36.06 ± 12.986	50.44 ± 22.786	55.55 ± 11.878	2.85 ± 1.208	2.31 ± 0.927
	Rural	41.41 ± 12.109	30.91 ± 12.424	55.04 ± 14.838	49.95 ± 16.344	2.22 ± 0.875	1.81 ± 0.612
	P	0	0	0.059	0	0	0
Type of Family	Nuclear	43.35 ± 13.408	35.42 ± 11.813	56.57 ± 16.725	51.05 ± 16.009	2.50 **± 1.088**	2.07 ± 0.794
	Joint	45.50 ± 13.385	25.51 ± 13.412	41.97 ± 20.409	56.33 ± 9.437	2.41 ± 1.024	1.86 ± 0.79
	P	0.19	0	0	0.004	0.471	0.033
Marital status	Married	45.03 ± 13.392	34.33 ± 12.804	54.58 ± 17.722	52.80 ± 15.275	2.55 ± 1.097	2.07 ± 0.811
	Unmarried	28.50 ± 9.859	28.00 ± 3.113	65.50 ± 9.859	43.50 ± 12.972	2.00 ± 0	1.50 ± 0.519
	Widow	35.77 ± 3.337	17.09 ± 2.86	22.82 ± 2.954	50.27 ± 5.063	1.68 ± 0.477	1.68 ± 0.477
	P	0	0	0	0.058	0	0.004
Religion	Hindu	44.13 ± 13.88	33.37 ± 13.249	53.46 ± 18.514	52.17 ± 14.801	2.52 ± 1.109	2.00 ± 0.818
	Muslim	43.60 ± 6.197	24.60 ± 6.197	33.47 ± 16.008	64.87 ± 9.812	2.00 ± 0	2.00 ± 0
	Christian	38.00 ± 0	34.73 ± 3.615	64.87 ± 9.812	42.67 ± 12.91	2.00 ± 0	2.53 ± 0.516
	P	0.223	0.031	0	0	0.037	0.039
Caste	SC	41.51 ± 12.037	32.36 ± 11.259	45.67 ± 8.365	49.82 ± 15.424	2.05 ± 1.099	1.85 ± 1.182
	ST	44.59 ± 13.134	32.74 ± 12.437	57.88 ± 14.725	46.21 ± 13.889	2.21 ± 1.008	2.09 ± 0.621
	OBC	42.06 ± 10.974	35.62 ± 12.692	49.34 ± 22.732	46.58 ± 18.121	2.66 ± 1.073	1.89 ± 0.64
	GEN	44.52 ± 14.114	32.68 ± 13.252	54.45 ± 19.05	54.76 ± 13.543	2.55 ± 1.059	2.07 ± 0.771
	P	0.418	0.488	0.008	0	0.011	0.211
Educational Status	Illiterate	36.92 ± 4.148	25.75 ± 9.921	40.35 ± 20.252	39.29 ± 11.568	1.46 ± 0.503	1.60 ± 0.495
	Primary Education	38.15 ± 10.895	30.56 ± 10.098	55.00 ± 14.662	45.93 ± 11.237	2.25 ± 0.819	1.84 ± 0.719
	Secondary Education	52.30 ± 13.204	40.63 ± 11.629	52.43 ± 21.074	60.05 ± 16.095	3.02 ± 1.045	2.40 ± 0.79
	Graduate And Above	43.95 ± 14.172	30.16 ± 14.707	59.52 ± 15.014	58.20 ± 8.551	2.66 ± 1.146	2.00 ± 0.846
	P	0	0	0	0	0	0
Employment Status	Unemployed	40.75 ± 11.476	32.50 ± 8.94	47.86 ± 21.137	43.41 ± 13.395	2.03 ± 0.719	1.90 ± 0.612
	Unskilled Worker	33.33 ± 3.371	18.67 ± 10.429	50.00 ± 0	56.33 ± 5.427	2.00 ± 0	1.00 ± 0
	Businessman	51.86 ± 11.7	39.16 ± 14.42	63.07 ± 15.526	57.24 ± 12.796	3.12 ± 0.98	2.76 ± 0.742
	Service Holder	56.42 ± 10.569	42.85 ± 12.056	64.02 ± 8.599	61.60 ± 15.152	3.33 ± 1.15	2.27 ± 0.448
	Housewife	35.67 ± 8.087	25.90 ± 9.501	44.42 ± 17.948	47.58 ± 12.962	2.10 ± 1.059	1.62 ± 0.666
	Retired	38.97 ± 16.387	29.38 ± 9.47	49.14 ± 18.763	64.62 ± 9.47	2.24 ± 1.091	1.76 ± 0.83
	P	0	0	0	0	0	0
SE Status	Upper Class	46.83 ± 12.888	35.93 ± 10.064	67.57 ± 10.093	53.35 ± 13.426	2.82 ± 1.097	2.13 ± 0.596
	Upper Middle Class	54.07 ± 14.907	44.20 ± 9.17	64.74 ± 10.219	61.52 ± 11.551	3.30 ± 1.002	2.61 ± 0.899
	Middle Class	41.19 ± 6.591	32.54 ± 12.857	38.57 ± 9.474	51.30 ± 20.399	2.59 ± 0.798	2.19 ± 0.397
	Lower Middle Class	44.05 ± 13.713	33.50 ± 14.302	51.97 ± 21.092	51.27 ± 15.579	2.65 ± 0.974	2.10 ± 0.878
	Lower Class	38.43 ± 11.176	26.43 ± 10.204	46.10 ± 17.576	48.80 ± 12.609	1.77 ± 0.807	2.13 ± 0.596
	P	0.000	0.000	0.000	0.000	0.000	0.000

Table 4: Multiple linear regression analysis.

QOL domains	Variables	Un Standardized Coefficients		Standardized Coefficients	T	P
		B	SE	Beta		
Q1	SECLASS	-0.216	0.037	-0.295	-5.765	.000**
	Occupation	0.023	0.031	0.05	0.747	0.456
	Educational status	0.166	0.074	0.152	2.24	.026**
	Religion	-0.204	0.122	-0.082	-1.674	0.095
	Marital Status	-0.23	0.117	-0.108	-1.972	.049**
	Residence	-0.561	0.103	-0.258	-5.433	.000**
	Sex	0.034	0.179	0.013	0.19	0.85
	Age	-0.184	0.097	-0.098	-1.898	0.058
Q2	SECLASS	-0.163	0.029	-0.301	-5.709	.000**
	Occupation	0.063	0.023	0.18	2.711	0.007
	Educational status	-0.237	0.059	-0.29	-4.018	.000**
	Religion	0.447	0.095	0.243	4.727	.000**
	Marital status	-0.315	0.09	-0.198	-3.505	.001**
	Residence	-0.597	0.078	-0.37	-7.644	.000**
	Sex	-0.668	0.137	-0.34	-4.866	.000**
	Age	-0.259	0.072	-0.187	-3.577	.000**
	Caste	0.13	0.04	0.167	3.273	.001**
	Type of family	0.149	0.09	0.079	1.645	0.101
Physical Domain	Se Class	-2.095	0.489	-0.229	-4.28	.000**
	Occupation	0.337	0.406	0.057	0.829	0.408
	Educational status	-0.273	0.97	-0.02	-0.282	0.778
	Marital status	-3.432	1.423	-0.128	-2.411	.016**
	Residence	-4.779	1.339	-0.176	-3.57	.000*
	Sex	-7.753	2.36	-0.234	-3.286	.001**
	Age	1.952	1.275	0.084	1.532	0.126
Psychological Domain	SECLASS	-2.644	0.45	-0.301	-5.88	.000**
	Occupation	0.937	0.372	0.164	2.521	.012**
	Educational status	-3.449	0.888	-0.262	-3.882	.000**
	Marital status	-7.032	1.421	-0.273	-4.948	.000**
	Residence	-6.109	1.241	-0.234	-4.922	.000**
	Sex	-7.431	2.117	-0.234	-3.51	.001**
	Age	-3.256	1.145	-0.145	-2.842	.005**
	Type of family	-5.713	1.424	-0.188	-4.013	.000**
	Religion	0.694	1.477	0.023	0.47	0.639
Social Domain	Seclass	-4.314	0.648	-0.339	-6.653	.000**
	Occupation	1.059	0.524	0.128	2.021	.044**
	Educational status	-2.877	1.3	-0.15	-2.213	.028**
	Marital status	-10.865	1.999	-0.291	-5.437	.000**
	Sex	-5.478	3.103	-0.119	-1.766	0.078
	Age	-6.434	1.593	-0.198	-4.039	.000**
	Type of family	-8.734	2.02	-0.199	-4.323	.000**
	Religion	3.218	2.103	0.075	1.53	0.127
	Caste	3.414	0.902	0.187	3.786	.000**

Environmental Domain	SECLASS	0.319	0.515	0.031	0.619	0.536
	Occupation	1.172	0.417	0.178	2.808	.005**
	Educational status	6.208	1.015	0.408	6.117	.000**
	Sex	-2.366	2.452	-0.065	-0.965	0.335
	Age	5.04	1.304	0.194	3.864	.000**
	Type of family	4.859	1.577	0.139	3.08	.002**
	Religion	1.83	1.539	0.053	1.189	0.235
	Caste	0.366	0.712	0.025	0.514	0.607
	Residence	-2.098	1.379	-0.07	-1.522	0.129

** (P<0.05)

of general health and overall QOL. This finding is consistent with that of Joshi Utsav et al. [7], who showed significant improvement in the scores of the all the domains with employment status of the participants [8].

Sex and Income appears to be a novel predictor of QOL. Income was significantly associated with three domains of the WHOQOL-BREF: Psychological domain, environmental domain, and overall perception of general health and overall QOL. Joshi Utsav et al. [7] also reported higher QOL score among males and people with higher income, in all domains. This is not surprising because patients with higher income can easily afford better treatment and fulfill their needs. A number of socio-demographic factors that seem to affect QOL in other studies have not been found to be significant predictors of QOL in this study. These results are in line with studies by many other studies [7-15].

Conclusion

We found that the sample population in this study, had overall low QOL scores: Environmental domain (52.30 ± 14.880), psychological domain (33.07 ± 12.899), social domain (53.11 ± 18.699), and physical domain (43.86 ± 13.416) using WHOQOL-BREF questionnaire. Age, Sex, Religion, Residence, Caste, Employment status, Marital status, Educational status, SE status, Type of family were found to affect one or more domains of QOL in such patients. From this study, we can say that various Socio-demographic factors were independent positive and negative predictors of QOL of patients on hemodialysis. There is a need to conduct health care awareness among Patients Undergoing Hemodialysis to focus on health conditions and services available to them. More elaborate study with larger sample size could be done in the future. Study needs to cover wider study area covering all dialysis units.

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