# Quality of Life in Chronic Hemodialysis Patients in Al-Qurayat General Hospital

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#### ABSTRACT

**Background:** hemodialysis process is a life-long intervention, involves multiple contributing factors to be completed; including: scheduling of hemodialysis sessions, patient presence in hemodialysis unit, patient family sharing and cooperation, availability and readiness of hemodialysis instruments and tools, availability, cooperation and readiness of hemodialysis unit staff. **Objective:** this study aimed to promote the quality of life in patients on chronic hemodialysis patients in Al Qurayat General Hospital in Saudi Arabia. We tried to determine the factors that affect the quality of life.

Material and Methods: this was a descriptive, uncenter and non-interventional study. All patients had chronic hemodialysis in Al Qurayat general hospital. A questionnaire contains all questions regarding the objective of this study. Data were taken via interviewing 76 patients; 36 males, and 40 females aged 14 to above 60. All patients were interviewed individually to fill the questionnaire directly. Results: 76 patients on chronic hemodialysis in the Artificial Kidney Unit (AKU) in Al Qurayat Hospital were studies, 36 males and 40 females, their ages ranged between less than 14 to above 60, mean age 49.5 years, for some items correlated with quality of their life affected by chronic hemodialysis through a special questionnaire was designed for this purpose. Conclusion: male and female patients undergoing chronic hemodialysis were almost equally in numbers. A considerable percentage of patients on chronic hemodialysis is lying in the productive adult age group. Patients on chronic hemodialysis spend a considerable mean time per day to undergo hemodialysis sessions, for undergoing a mean 11 sessions per month. All aspects of patients on chronic hemodialysis life are affected negatively in most patients, either mildly or moderate to severe, and to extreme extent occasionally; including personal, family, community/social, and occupational/professional aspects.

Keywords: Chronic, Hemodialysis, Al-Qurayat General Hospital.

#### INTRODUCTION

Hemodialysis process is life-long intervention, involves multiple contributing factors to be completed; including: scheduling hemodialysis sessions, patient presence in hemodialysis unit, patient family sharing and cooperation, availability and readiness of hemodialysis instruments and tools, availability, cooperation and readiness of hemodialysis unit staff, convenient time for both patient and hemodialysis unit, pre and post hemodialysis follow up, co-morbidity and patient health status impact, that actually have a considerable effect on patient life pattern and quality (1-5,8).

Many non-patient factors also may affect hemodialysis process and consequently patient life himself, including: family cooperation, social and community support, governmental and nongovernmental promoters. Investigating the quality of life in patients on chronic hemodialysis will demonstrate the actual vital suffers of these patients regarding all contributing mentioned above or any other detected factors Changing, through this study. regulating, eliminating some supporting. or of these contributing factors will help these patients enjoy a more effective and happier life.

**OBJECTIVE:** This study aimed to promote the quality of life in patients on chronic hemodialysis patients in Al Qurayat General Hospital in Saudi Arabia. We tried to determine the factors that affect the Quality of life.

# MATERIAL AND METHODS

This was a descriptive, uncenter, and non-interventional study. All patients had chronic hemodialysis in Al-Qurayat general hospital. A questionnaire contained all questions regarding the objective of this study. Data were taken via interviewing 76 patients; 36 males, and 40 females aged 14 to above 60. All patients were interviewed individually to fill the questionnaire directly. The study was done after approval of ethical board of Al-Qurayat General Hospital.

# **RESULTS**

76 patients on chronic hemodialysis in the Artificial Kidney Unit (AKU) in Al Qurayat hospital were included, 36 males, and 40 females, their ages ranged between less than 14 to above 60, mean age 49.5 year, for some items correlated with quality of their life affected by chronic hemodialysis through a special questionnaire was designed for this purpose. The results of the questioned items could be demonstrated in the following

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2198

Table 1: Gender

Gender	No.	%	Age groups, year	No.	%
Male	36	47.3	14-30	6	7.8
Female	40	52.6	31-60	38	50
			>60	32	42.1

Table 2: Hemodialysis

Years	No.	%	Per month	No.	%	
< 2	58	76.3	7-10	28	36.8	
2-4	18	23.6	>10	48	63.1	
Per week			Hours/session			
3	76	100	<6	60	78.9	
			6-8	16	21.0	

# **Table 3: Personal life effects**

Eating habits	No.	%	habits & hobbies	No.	%
No effect	20	26.3	No effect	25	32.8
Mild	42	55.2	Mild	26	34.2
Moderate	12	15.7	Moderate	24	31.5
Severe	2	2.6	Severe	2	2.6

**Table 4: Sleeping habits** 

Sleeping habits	No.	%	activities& projects	No.	%
No effect	22	28.9	No effect	24	31.5
Mild	40	52.6	Mild	34	44.7
Moderate	14	18.4	Moderate	18	23.6

**Tables 5: Family life effects** 

relationships	No.	%	habits, activities,	No.	%
&communication			&projects		
No effect	10	15.7	No effect	15	19.7
Mild	33	50	Mild	30	39.4
Moderate	22	28.9	Moderate	28	36.8
Severe	4	5.2	Severe	4	5.2
Extreme	2	2.6			

Table 6: Community/social life effects

relationships&	No.	%	habits, activities&	No.	%
communications			projects		
No effect	13	15.7	No effect	21	27.6
Mild	46	63.1	Mild	33	43.4
Moderate	16	21.0	Moderate	20	26.3
Severe	2	2.6	Severe	3	3.9

Table 7: Occupational/professional life effects

duties & tasks	No.	%	activities, projects & training	No.	%	upgrading	No.	%
No effect	13	17.1	No effect	23	30.2	No effect	24	
Mild	42	55.2	Mild	31	40.7	Mild	30	31.5
Moderate	23	30.2	Moderate	21	27.6	Moderate	22	39.4

By inspecting the results of this study, we can record the following observations; female patients on chronic hemodialysis are slightly more than male patients. Half of patients who had chronic hemodialysis were in adult age group (31-60), the age of production and activity in human life, while less than half of these patients were in elderly age group (>60) and few were in young age group (14-30). Moreover, <sup>3</sup>/<sub>4</sub> studied patients were on chronic hemodialysis for less than 2 years, while 1/4 studied patients were on chronic hemodialysis for 2-4 years, mean hemodialysis duration 2.2 year. All the studied patients were on 3 hemodialysis sessions per week. Furthermore, about 1/3 studied patients had 7-10 hemodialysis sessions per month, while about 2/3 studied patients has more than 10 hemodialysis sessions per month, hemodialysis sessions per month was 11. However, 3/4 studied patients spend less than 6 hours for each hemodialysis session, while ¼ studied patients spend 6-8 hours for each hemodialysis session, mean 5.4 hours for each hemodialysis session. Mean time spent for hemodialysis sessions per month was 59.4 hour for each patient, about 1.98 hour per day, 8.25 % of day hours.

# Personal life effects

Eating habits of 3/4 studied patients were affected by chronic hemodialysis, either mildly in more than half studied patients, or moderate to severe in about 1/4 studied patients. On the other hand, sleeping habits of 3/4 studied patients were affected by chronic hemodialysis, either mildly in more than half studied patients, or moderately in about 1/5 the studied patients. Personal habits and hobbies in 2/3 studied patients were affected by chronic hemodialysis, either mildly in 1/3 studied patients, or moderate to severe in 1/3 studied patients. Personal activities and projects in more than of 3/4 studied patients were affected by chronic hemodialysis, either mildly in about half studied patients, or moderately in about 1/4 studied patients.

# Family life effects

Family relationships and communications in 5/6 studied patients were affected by chronic hemodialysis, either mildly in 3/6 studied patients, moderate to severe in 2/6 studied patients, or even extreme in 5% of studied patients. Family habits, activities and projects in 4/5 studied patients were affected by chronic hemodialysis, either mildly in 2/5 studied patients, or moderate to severe in 2/5 studied patients.

# Community/social life effects

Community/ social relationships and communications in about 5/6 studied patients were

affected by chronic hemodialysis, either mildly in 2/3 studied patients, or moderate to severe in 1/4 studied patients. Community/social habits, activities and projects in 3/4 studied patients were affected by chronic hemodialysis, either mildly in more than 2/5 studied patients, or moderate to severe in 1/4 studied patients.

# Occupational/professional life effects

Occupational/professional duties and tasks in 5/6 studied patients are affected by chronic hemodialysis, either mildly in more than 3/6 studied patients, or moderately in more than 2/6 studied patients. Occupational/Professional activities, projects and training in about 3/4 studied patients are affected by chronic hemodialysis, either mildly in 2/5 studied patients, or moderately more than 1/4 studied patients. Occupational/Professional upgrading in more than 2/3 studied patients are affected by chronic hemodialysis, either mildly in more than 1/3 studied patients, or moderately in about 1/3 studied patients.

#### **Patient comments**

Providence of donors was the most comment mentioned by the studied patients, other comments involved: thanks for AKU including all staff and workers, increase staff number in AKU for better nursing services and better follow up of patients by doctors.

#### **DISCUSSION**

# Comparison with some international similar studies

Compared to international similar studies, we found the following observations: similar results with Zouari's study that aimed about quality of life in chronic hemodialysis patients, which concluded that there was high frequency of QOL which includes a holistic approach to medicine by counting not only the patient's physical status, but also social, mental and emotional mental status (11). impairs upon patients on hemodialysis underlining the interest of a systematic effort to assess the quality of life in those patients (9). It also showed the interest of acting upon modifiable factors correlated with the alteration of the quality life. Also, the study about clinical, sociodemographic, and psychological correlates of health-related quality of life in chronic hemodialysis patients. Birmelé has demonstrated effects clinical. similar more specific on sociodemographic and psychological concluded that altered Quality of Life of patients under went chronic hemodialysis was associated with physical and psychiatric comorbidities, in particular depression and anxiety (10). Regarding the study of quality of life, clinical outcome, personality and coping in chronic hemodialysis patients, renal failure. Our results showed the importance of an integrated and multidirectional management of patients chronically undergoing HD and living in a non-urban context.

#### **CONCLUSION**

Male and female patients undergoing chronic hemodialysis are almost equally in numbers. A considerable percentage of patients on chronic hemodialysis is lying in the productive adult age group. Patients had chronic hemodialysis spend a considerable mean time per day to undergo hemodialysis sessions, for undergoing a mean 11 sessions per month. All aspects of patients on chronic hemodialysis life were affected negatively in most patients, either mildly or moderate to severe, and to extreme extent occasionally; including personal, family, community/social and occupational/professional aspects.

#### SUGGESTIONS AND RECOMMENDATIONS

Applying all accredited, possible and available methods are needed to decrease the time spent by hemodialysis session such as: support home dialysis process, that a person can do at home using a special machine encourage kidney donation process and provid more staff for AKU as required by standard accredited criteria for better nursing submitted to chronic hemodialysis patients. Moreover, launch widespread periodic educational campaigns concerning hemodialysis process and targeting all population and community sectors and groups include preventive and caring measures for better approach and care of patients on chronic hemodialysis.

#### REFERENCES

1- Abdelilah E, Yassamine B,Naima A and Bouchra O (2017):Depression and anxiety disorders in chronic hemodialysis patients and their quality of life: A cross-sectional study about 106 cases in the northeast

- of morocco. Saudi Journal of Kidney Disease and Transplantation, 28:2:341-348
- 2- Elliot K, Tannor A, Elize A, Kenneth K,Susan C, Van S and Razeen D (2017):Quality of life in patients on chronic dialysis in South Africa: a comparative mixed methods study. Bio. Med. Central Nephrology BMC., https://doi.org/10.1186/s12882-016-0425-1
- 3- Giuseppina D, Mariadelina S, Paolo R, Mariarita C, Maria C and Giovanniand M (2017): Quality of life, clinical outcome, personality and coping in chronic hemodialysis patients. Journal of Renal Failure, 39:1-12.
- **4- Hall N, Larive B, Painter P** *et al.* **(2012):** Effects of six versus three times per week hemodialysis on physical performance, health and functioning. Clinical Journal of the American Society of Nephrology, 7(5):782–794.
- 5- Khaled K, Mark U, Steven D and Weisbord (2009): Symptom burden, depression and quality of life in chronic and end-stage kidney disease. Clinical Journal of the American society of Nephrology, 4:6 1057-1064.
- 6- The Frequent Hemodialysis Network (2010): Inclinic hemodialysis six times per week versus three times per week. New England Journal of Medicine., 363(24):2287–2300.
- 7- Vasilieva IA (2006): Quality of life in chronic hemodialysis patients in Russia. Hemodial. Int., 10(3):274-284.
- 8- Weinhandl ED, Liu J, Gilbertson DT, Arneson TJ and Collins AJ (2012): Survival in daily home hemodialysis and matched thrice-weekly in-clinic hemodialysis patients. Journal of the American Society of Nephrology, 23(5):895–904.
- 9- Zouari L, Omri S, Turki S, Maâlej M, Charfi N, Ben Thabet J, Mahfoudh H, Hachicha J, and Maâlej M (2016): Quality of life in chronic hemodialysis patients: about 71 cases. Tunis Med., 94(1):40-5.
- 10- Birmelé B1, Le Gall A, Sautenet B, Aguerre C, and Camus V (2012): Clinical, sociodemographic, and psychological correlates of health-related quality of life in chronic hemodialysis patients. Psychosomatics, 53(1):30-7
- 11- Baldassarre, Fulvia G, Arthur, Heather M, DiCenso, Alba, and Guyatt Gordon (2002): Effect of coronary artery bypass graft surgery on health-related quality of life. Heart and Lung, 31(6).