Acta Scientific MEDICAL SCIENCES (ISSN: 2582-0931)

Volume 8 Issue 3 March 2024

Research Article

Chronic Renal Failure: Perception and Knowledge of Patients Admitted at the Terminal Stage to the Nephrology Department of the Brazzaville University Hospital

Gaël Honal Mirounga*, Daniel Tony Eyeni Sinomono, Éric Ngandzali-Ngabe Soraya Ntandou, Francky Ambounou, Précieux Ngoma, Berline Ndinga, Dalhia Mboungou and Richard Loumingou

Nephrology Department, Brazzaville University Hospital, Faculty of Health Sciences, Marien Ngouabi University, Republic of the Congo

***Corresponding Author:** Gaël Honal Mahoungou, Nephrology Department, Brazzaville University Hospital, Faculty of Health Sciences, Marien Ngouabi University, Republic of the Congo

Received: January 16, 2024

Published: February 10, 2024

Abstract

Introduction: Chronic kidney disease (CKD) poses a real public health problem in Congo.In order to enact preventive measures against CKD, in order to reduce its frequency, we undertook to conduct a survey to evaluate the perception of chronic disease among newly diagnosed endstage chronic renal failure patients.

Patients and Methods: This was a descriptive cross-sectional study with prospective data collection, which took place over the period from January 1 to October 30, 2023, in the Nephrology department of the CHUB. It covered 128 patients who were exhaustively identified. Sociodemographic data and data on illness perception were collected from medical records and during individual interviews using pre-established survey forms. Microsoft Excel 2021 software enabled data analysis and processing.

Results: we found a male predominance with a sex ratio of 2.5. Median age was 50.The perception of the CRI was erroneous among46.1% of patients.51.6% of patients thought that

CKD was incurable, 61.7% of patients considered that CKD is a fairly worrying disease. 46.9% of patients believed that CKD is of supernatural cause.36.7% of patients thought that CKD could be treated with traditional medicine,27.3% through modern medicine and 18% through prayer.76.6% of patients had never heard of CKD before their hospitalization.

Conclusion: The perception of chronic kidney failure by patients in the end stage of their kidney disease is incorrect. This may be due to the general public's low level of knowledge about kidney diseases. It is therefore important to carry out general public awareness campaigns on kidney diseases.

Keywords: Perception; Chronic Renal Failure; Congo Brazzaville

Introduction

In the Republic of Congo, as in other low-resource countries, chronic kidney failure (CKD) represents a real public health problem due to the complications it causes, the high cost of its management, in a context where universal health insurance is not yet fully implemented [1]. It is discovered late and most often at the terminal stage requiring renal replacement therapy. The renal replacement technique available and used in Congo is hemodialysis (HD), but the latter constitutes a major obstacle due to its high cost estimated in 2023 at 7,569,600 FCFA per year payable by the patient [1]. An intra-hospital study carried out at the Brazzaville University Hospital showed that 52.1% of patients admitted to nephrology had CKD and among them 72.5% were in the terminal stage. The discovery was recent in 61.9% of patients. The mortality rate was 49.9% [2]. This high prevalence and mortality could be largely explained by late consultation evidenced by a frequency of more than 30% of dialysis emergencies but also by difficult access to dialysis [3].

The frequency of non-terminal renal failure in the general population in Congo is currently unknown. No general public information campaign to raise awareness among the Congolese about kidney diseases has yet been carried out. The tendency in the general population is rather towards ignorance of the symptoms and treatments of CKD [4].

It is with the aim of enacting preventive measures on CKD, in order to reduce its frequency, that we undertook to conduct a survey to evaluate the perception on CKD of patients with chronic renal failure in the newly terminal stage. diagnosed.

Material and Method

We conducted a cross-sectional descriptive study with prospective data collection over 10 months which took place over the period from January 1 to October 30, 2023. The study was carried out in the nephrology department of the Brazzaville University Hospital. This is the only service specialized in the management of kidney diseases in the entire city of Brazzaville.

We randomly included newly discovered ESRD patients of all ages who were able to answer the questions. A total of 128 patients were exhaustively identified. Data collection was done using a questionnaire pre-established in French and then translated into national languages (Lingala and Kituba). This questionnaire consisted of two parts: the first part assessed patients' knowledge about CKD and the second provided information on the perception of the disease by these patients. The latter was designed taking inspiration from the "Brief Illness Perception Questionnaire" (Brief IPQ), a questionnaire assessing the cognitive and emotional representations of the illness [5]. It consisted of 6 items, all items were evaluated using a response scale. Two items dealt with representations of cognitive illnesses: chronology (item 1), treatment control (item 2). These items were rated from 0 to 1. One item assessed emotional representations: worry (item 3) and another assessed the understandability of the illness (item 4). These items were rated from 0 to 2. Item 5 assessed causal representation and item 6 assessed knowledge of the disease. These 2 items were rated from 0 to 1.

The total score rated from 0 to 8 designated the sum of each point obtained and made it possible to classify the perception into: erroneous, fairly good, good.

- 0-3: incorrect perception
- 4-5: fairly good perception
- 6-8: good perception.

Data entry, processing and analysis were carried out using Microsoft Office Excel 2021 software. The various tables were generated using Microsoft Office Excel 2021 software. The quantitative variables were expressed as average with standard deviation or in median with the first and third quartile. The median was used when 10% of the entire part of the mean was greater than the standard deviation.

Results

Sociodemographic characteristics

Age and sex

The median age was 50 years (the 1st quartile is 42 years; the 3rd quartile is 66 years) with extremes of 21 and 81 years.

The study sample consisted of 91 (71.1%) men and 37 (28.9%) women, i.e. a sex ratio of 2.5.

Table 1 illustrates the distribution of patients by age groups.

	N = 128	
	not	%
<30	13	10.2
30-39	14	10.9
40-49	30	23.4
50-59	28	21.9
≥60	43	33.6

Table 1: Distribution of patients by age groups (in years).

		N = 128
	not	%
Occupation		
Unemployed	38	29.7
Actor in the informal sector	35	27.3
State employee	22	17.2
Retirement	18	14.1
Student	10	7.8
Private sector employee	5	3.9
Marital status		

Bachelor	81	63.3
Married/common law	40	31.2
Divorced/widowed	7	5.5
Educational level		
None	2	1.6
Primary	45	35.2
Secondary	54	42.2
Superior	27	21
Socioeconomic level		
Down	90	70.3
AVERAGE	34	26.6
Superior	4	3.1
Religion		
Christianity	114	89.1
Atheism	9	7
Animism	5	3.9

Table 2: Sociodemographic profile of patients participating in the study.

Perception of IRCT

		N=128
	not	%
General perception		
Misperception	59	46.1
Fairly good perception	53	41.4
Good perception	16	12.5
Perception of evolution		
Curable disease	62	48.8
Incurable disease	66	51.6
Perception of treatment		
Traditional medicine	47	36.7
Modern medicine	35	27.3
Pray	24	18.8
Self-medication	22	17.2
Perception about the severity of CKD		
Mild disease	10	7.8
Quite worrying disease	79	61.7
Serious illness	39	30.5
Perception about the cause of CKD		
Natural cause	68	53.1
Supernatural cause	60	46.9

Table 3: Perception of IRCT.

Knowledge of IRC

Understanding the disease

The distribution of patients according to understanding of the disease is shown in table 4.

		N = 128
	not	%
Doesn't understand anything at all	98	76.6
Understands a little	20	15.6
Understood perfectly	10	7.8

Table 4: Understanding of the disease.

Knowledge of kidney failure before diagnosis

In the study population, 30 (23.4%) patients had heard about renal failure before hospitalization. The main sources of information were those close to them (50%), the media (36.7%) and health workers (13.3%).

Knowledge about the treatment of ESRD

In our series, 28 (22%) patients thought that ESRD can only be treated with medication, 5 (4%) patients were aware of the possibility of treatment by kidney transplant and 12 (9%) patients were at It is common knowledge that dialysis is a treatment for ESRD. No patient knew the different modalities of dialysis (peritoneal dialysis and hemodialysis).

Discussion

Sociodemographic characteristics

The median age of our patients was 50 years [42 years; 66 years old]. CKD patients in Congo are young adults; thus joining the data from African literature. Diakité., *et al*. in 2012 found a median age of 40 ± 12 years [6]. N'zoue., *et al*. found a median age of 46 years. In economically developed countries, CKD is a pathology of the elderly. In France the median age is 70 years old [7,8]. This discrepancy could be explained by greater accessibility to care, prevention measures and the aging of the Western population.with its best life expectancy.

A male predominance was found in our study with a sex ratio of 2.5.Male predominance is an epidemiological constant found in other African studies [9-13]. No scientific evidence explains this

sex inequality. Some scientists cite classic risk factors such as obesity and hypertension as well as a riskier lifestyle with excessive consumption of salt, phosphorus and proteins in men [14].

Perception

Illness perception is how a person understands and feels about illness. It can be influenced by biological, psychological, social and cultural factors. This influences the choice of seeking care. The perception of CKD by our study population is different from the explanations given by modern sciences. Indeed, 46.1% of the patients collected had an erroneous general perception of the disease, almost half of the patients (48.8%) believed that CKD is curable. This erroneous perception reflects the lack of information among the Congolese population about CKD. More than half (76.6%) of the patients during our survey had never heard of kidney failure before this hospitalization. Result close to those Oluyombo., *et al*. in Nigeria where 66.3% of participants had never heard of chronic kidney disease [14].

46.9% of study participants believed that CKD was supernaturally caused. This result reflects the population's attachment to the tradition which represents the bodyhuman as a mysterious entity capable of being possessed by an "ancestor" or by "malicious sorcerers" [16,17]. The expression of this possession results in the appearance of illness, which justifies that18.8%of patients think that CKDcan be treated with prayers. Thus, some patients first consult pastors, fetishists when signs of the disease appear.. This observation was also made by Oluyombo et al. in Nigeria where 45.9% of participants believed that CKD could be cured through spiritual means [15].

Our study shows that 36.7% of patients believe that CKD can be treated with traditional medicine. Oluyombo., *et al*. in Nigeria found a result similar to ours. Indeed, 47.8% of his study population believed that CKD could be cured by the use of local herbal concoctions. This result shows that atCongo, as in other sub-Saharan African countries, modern medicine and traditional medicine coexist. Despite awareness campaigns to encourage the use of modern medical care structures, the population's attachment to traditional medicine remains and it is still relevant today and takes care of a significant part of the population, both urban and rural [18]. The WHO officially recognizes traditional medicine and estimates that it is used by 80% of the population in sub-Saharan Africa [19].

The results provided by this survey match those of a previous study carried out in a university environment and which found poor knowledge as well as an erroneous perception of kidney diseases [4]. These data reflect the need to promote the prevention of chronic kidney disease through awareness campaigns among people at risk of kidney disease (diabetes, hypertension, gout, HIV, etc.), doctors treating chronic pathologies, and the general population. via media that have broad distribution power such as: printed and television newspapers, TV shows, social networks.

Conclusion

The perception of chronic kidney disease by ESRD patients is incorrect. This may be due to the general public's low level of knowledge about kidney diseases. It is therefore important to carry out public awareness campaigns on kidney diseases.

Bibliography

1. Mahoungou GH., *et al*. "Cost of Therapeutic Care for Patients on Maintenance Hemodialysis in a Public Hospital in Congo Brazzaville in 2022". *International Journal of Nephrology Kidney Fail* 9.2 (2023): 1-6.

2. Sinomono DE., *et al*. "Epidemiological profile of chronic renal failure at Brazzaville University Hospital in 2016". *Nephrology and Therapeutics* 13.5 (2017): 396.

3. Mahoungou GH., *et al*. "Epidemiological, Clinical and Evolutionary Profiles of Patients Admitted in a Dialytic Emergency Situation at the University Hospital of Brazzaville". *Asian Journal of Research in Nephrology* 4.3 (2021): 18-27.

4. Mahoungou G., *et al*. "Knowledge and perceptions of kidney disease among workers of Marien Ngouabi University, Republic of Congo". *HEALTH SCIENCES AND DISEASE* 23.6 (2010): 109-112

5. Broadbent E., *et al*. "The Brief Illness Perception Questionnaire". *Journal of Psychosomatic Research* 60.6 (2006): 631-637.

6. Diakite F., *et al*. "Seroprevalence of viral hepatitis B and C, and human immunodeficiency virus in chronic renal failure patients in the Nephrology department of the Donka National Hospital". *African Journal of Internal Medicine* 6.1-3 (2019): 28-33.

7. Hamroun A., *et al*. "Specificities of nephropathy in the elderly". *Nephrology and Therapeutics* 15.7 (2019): 533-552.

8. World Kidney Day Symposium-Kidney Foundation (2024).

9. Diakite F., *et al*. "Emergency haemodialysis: risk factors for mortality at the Donka National Haemodialysis Centre". *HEALTH SCIENCES AND DISEASE* 24.4 (2023): 40-44.

10. Konan SD., *et al*. "First Emergency Hemodialysis Session at the Nephrology Department of Yopougon University Hospital: a Study of 146 Patients". *Health Sciences and Disease* 22.7 (2021): 83-87.

11. Ilboudo CS., *et al*. "Prognosis of Emergency Hemodialysis Patients in the Nephrology and Dialysis Department of the Sour Sanou University Hospital Center (Bobo Dioulasso)". *Health Sciences and Disease* 22.6 (2021): 11-14.

12. Dede Z., *et al*. "COVID-19 in diabetic patients with chronic renal failure: epidemiological and evolutionary profile". *Nephrology and Therapeutics* 18.5 (2022): 420.

13. Traore AK., *et al*. "Epidemiological data and outcome of emergency haemodialysis patients in the Point G University Teaching Hospital (Mali)". *Health Sciences and Disease* 24.6 (2023): 71-77.

14. Bridge B., *et al*. "Determinants and burden of chronic kidney disease in the population-based CoLaus study: a cross-sectional analysis". *Nephrology Dialysis Transplantation* 28.9 (2013): 2329-2339.

15. Oluyombo R., *et al*. "Awareness, knowledge and perception of chronic kidney disease in a rural community of South-West Nigeria". *Nigerian Journal of Clinical Practice* 19.2 (2016): 161-169.

16. Ouango JG., *et al*. "Traditional concept of madness and psychiatric therapeutic difficulties among the Moosé of Kadiogo". *SMQ* 23.2 (2007): 197-211.

17. Konaré DAO., *et al*. "Therapeutic pathways in Mali in mental health". *The Other* 15.1 (): 38-45.

18. Yao YP., *et al*. "Therapeutic itineraries for schizophrenics in Abidjan". *Psychiatric Information* 5 (2009): 461-469.

19. African Traditional Medicine Day 2022. WHO | Regional Office for Africa (2021).