

# Eight Years Later: The Evolution and Impact of Patient-Focused Multidisciplinary Clarification

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## ABSTRACT

**Introduction:** Portuguese guidelines advocate for multidisciplinary clarification consultations for stage 5 kidney disease. In October 2022, our hospital's nephrology department underwent restructuring, focusing on a patient-centered approach. This study aims to characterize patients, assess satisfaction, and compare data from 2014 to 2022.

**Methods:** Telephone questionnaires were used from October 2022 to June 2023, compared with a 2013-2014 similar study. Patient consent was obtained, and clinical records were reviewed.

**Results:** In 2013/2014, 82% responded, with 87.7% opting for hemodialysis (HD) and 12.2% for peritoneal dialysis (PD). In 2022/2023, 64.1% responded, with 60% choosing HD and 26% PD. All found the session useful, 96% felt capable of deciding, and 80% preferred audiovisual information. In 2014, 78% could decide on renal replacement therapy. Reasons for choices were consistent across the years.

**Conclusion:** Restructuring positively impacted awareness and decision-making, emphasizing the crucial role of multidisciplinary consultations in guiding chronic kidney disease patients toward informed treatment choices.

**Keywords:** Decision Making, Shared; Kidney Failure, Chronic/therapy; Quality of Life; Renal Dialysis; Renal Replacement Therapy

## INTRODUCTION

The benefits of informational programs in the treatment of chronic kidney disease (CKD) are indisputable and essential in disease management. According to Portuguese guidelines, every nephrology department should incorporate a multidisciplinary clarification consultation concerning therapeutic modalities in the treatment of stage 5 kidney disease.<sup>1</sup> Among its overarching goals is the contribution to fully informing patients about the various treatment modalities.

In October 2022, there was a restructuring of the multidisciplinary clarification consultation at our hospital. This initiative involved establishing specialized teams, and fostering a more harmonious collaboration among professionals dedicated to the education and empowerment of patients. Each specialized team consists of two nephrologists other than the patient's attending physicians, a nurse, a social worker, a psychologist, and a dietitian. In this way, all patients with stage 5 kidney disease are referred by their attending nephrologist to a multidisciplinary therapeutic options clarification consultation.

This reorganization enables a holistic, patient-centered approach to care. Before the restructuring of the consultation process, patient education was conducted by the attending nephrologist during a routine appointment. This approach made it challenging to adequately inform patients about therapeutic options, due to both the limited time available to the physician and the availability of audiovisual and other resources. Additionally, patients might not be mentally prepared at that time to discuss the therapeutic options for their condition. Furthermore, when education was provided solely by the attending physicians, it restricted the involvement of the nursing team to patients who opted for peritoneal dialysis. Social service follow-up was also conducted on separate dates, complicating its coordination and execution.

The objectives of this study were to characterize the population of patients assessed in multidisciplinary clarification consultations conducted in the nephrology service since October 2022, as well as to assess the level of satisfaction and subjective appreciation of patients regarding the consultations. Additionally, the study aimed to investigate

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differences in the responses obtained to the questionnaires related to consultations conducted in different periods, specifically in 2014 and 2022.

## METHODS

Descriptive, prospective, and retrospective study on information obtained through the implementation of a telephone questionnaire (as shown in Table 1) conducted in July 2023 to patients observed during multidisciplinary clarification consultations from October 2022 to June 2023. Data from the same questionnaire administered in the past to patients attending clarification consultations between September 2013 and August 2014, were also analyzed. To evaluate the patients' capacity to choose a therapeutic modality, we considered their ability to sign the Direção Geral da Saúde (DGS) declaration, which is

completed by patients to express their intentions regarding the treatment of end-stage chronic kidney disease. Consent was obtained from all patients who responded to the telephone questionnaire.

Additionally, data were analyzed and collected from patients who attended multidisciplinary clarification consultations spanning the period from October 2022 to June 2023 by reviewing clinical records related to demographic (age, gender) and clinical data [CKD etiology, serum creatinine, and estimated glomerular filtration rate (eGFR)]. Categorical variables have been elucidated through presentation as frequencies and percentages, while continuous variables have been delineated with means and standard deviations. For continuous variables displaying asymmetrical distributions, medians and interquartile ranges were employed. The statistical examination was executed utilizing SPSS™ version 28.1 tailored for Mac OS X.

**Table 1.** Questionnaire conducted with patients who attended the multidisciplinary clarification consultation in 2013/2014 and 2022/2023.

Question	Answer
1. Was the clarification session worthwhile?	a. yes b.no
2. Was one session sufficient?	a. yes b.no
2.1 If you answered no, how many sessions do you think you needed?	(Free answer)
3. What was the most valuable information received?	a. Written (pamphlet) b. Audio-visual (during the consultation) c. External information d. Unable to respond
4. Did you hear the opinion of other patients?	a. yes b.no
4.1 If you answered no, would you have liked to hear it?	a. yes b.no
5. Did you bring any family member/companion to the consultation?	a. yes b.no
6. If you did not choose hemodialysis, what was the reason?	a. Fear of needles b. Lower autonomy c. Schedule incompatibility
7. Why did you not choose peritoneal dialysis?	a. Lack of home conditions b. Lack of support c. Fear of contracting infections d. Fear of assuming responsibility for the treatment e. Medical indication f. Belief that it is more painful g. Belief that PD is less effective h. In HD, there is the opportunity to interact with other patients i. PD interfered with my personal life
8. Why did you not choose a renal replacement therapy?	(Free answer)
9. On a scale of 0 to 10, how would you rate the information session?	(Scale of 0 to 10)

## RESULTS

In the year 2022/2023, a total of 78 patients were observed during a multidisciplinary clarification consultation. Among them, 65.4% (n=51) were male, with a mean age of  $74.7 \pm 12.7$  years. The mean serum creatinine was  $3.6 \pm 0.9$  mg/dL, and the eGFR was  $16.7 \pm 5.6$  mL/min/1.73m<sup>2</sup> (calculated using the CKD-EPI formula). The patients predominantly exhibited CKD of indeterminate etiology

(n=21, 26.9%), multifactorial origin (n=15, 19.2%), and diabetic kidney disease (n=14, 17.9%).

Among the patients observed in the consultation since 2022, 64.1% (n=50) responded to the questionnaire and 60% (n=30) chose hemodialysis (HD) and 26% (n=13) peritoneal dialysis (PD). Regarding the patients observed in the multidisciplinary consultation in 2013/2014, 82% (n=41) responded to the questionnaire

and 87,7% (n=36) opted for HD and 12.2% (n=5) PD (as shown in Table 2). In the 5% (n=10) patients who opted

for conservative medical treatment, the mean age was  $86.0 \pm 7.5$  years.

**Table 2.** Therapeutic options chosen by patients assessed in multidisciplinary clarification consultation were compared across two distinct time frames.

	2013/2014, % (n)	2022/2023, % (n)
Hemodialysis	87.8% (n=36)	60% (n=30)
Peritoneal Dialysis	12.2% (n=5)	26% (n=13)
Conservative medical care		5% (n=10)
No decision		4% (n=2)
	41 (100%)	50 (100%)

Considering only the patients who responded to the questionnaire, all considered the clarification session useful, with 2% (n=1) indicating the need for an additional complementary session, and 96% (n=48) feeling capable of making an informed choice regarding end-stage CKD treatment. Concerning the information provided, 80% (n=40) found the audiovisual format more elucidating, while 14% (n=40) preferred written information. When asked about engaging with other patients for guidance, 48% (n=24) did not, and among them, 29.2% (n=7) expressed a desire to have done so.

Regarding patients assessed in 2014, all of them found the session useful, 31.7% (n=13) wished for more than one session, and 78% (n=32) of the patients were able to make a decision about kidney replacement therapy (KRT). Regarding the presented information, 70.7% (n=29) considered audiovisual information more relevant. Of the surveyed patients, 65.9% (n=27) claimed not to have sought instruction from other patients, with 63% (n=17) of them expressing a desire to have done so (table 3). A total of 78% (n=32) of the patients felt capable of making an informed choice at the end of a session.

**Table 3.** Responses to the questionnaires obtained through the questionnaire from patients assessed in multidisciplinary clarification consultation were compared across two distinct time frames.

	2013/2014, % (n)	2022-2023, % (n)
Question 1: The clarification session was worthwhile? – “yes” answer	41 (100%)	50 (100%)
Question 2: “Was one session sufficient? – “yes” answer	28 (68.3%)	49 (98%)
Question 3: “What was the most valuable information received”	Written (DGS guidelines and informational leaflet)	7 (4%)
	Audio-visual	40 (80%)
	External information	1 (2%)
	Unable to respond	2 (4%)
Question 4: “Did you seek the opinion of other patients?” – “yes” answer	14 (34.1%)	7 (29.2%)

Among surveyed patients who opted for HD, reasons cited for not choosing PD included fear of taking responsibility for the treatment (n=11; 36.7%) and lack of housing conditions (n=3; 10.0%). In 2014, the primary reasons for not choosing PD were fear of infections (n=17, 41.7%) and apprehension about taking responsibility for the treatment (n=15, 36.1%).

As for patients who opted for PD in 2022/2023, reduced autonomy (n=8, 61.5%) and schedule incompatibility (n=5, 38.5%) were the main reasons for not choosing HD. In 2014, those who did not choose HD cited reduced autonomy (n=33, 80.0%) and schedule incompatibility (n=8, 20.0%) associated with the technique.

Five patients (10%), evaluated in 2022/2023, chose conservative medical treatment, with the primary reason being the fragility of the patient. In 2013/2014 no one chose that option.

In 2022/2023, on a numerical scale, 40% of patients gave the consultation the highest rating of 10 points ( $9.0 \pm 0.95$  points).

## DISCUSSION

According to established guidelines, referral to a multidisciplinary consultation is recommended when the eGFR falls below 30 ml/min/1.72m<sup>2</sup> (1). Our analysis of the population assessed in the consultation reveals that referrals are being made in accordance with these regulations, underscoring the importance of timely referrals in effectively guiding patients, aligning with established guidelines.

As observed, a substantial number of patients evaluated in 2022 displayed confidence in decision-making, with a higher percentage acknowledging the efficacy of a single clarification session compared to those assessed in 2013.

Additionally, patients in 2022 expressed a preference for audio-visual information. These findings suggest that the restructuring of consultations, incorporating multidisciplinary teams focused on patient empowerment, has contributed to an enhanced patient capacity for decision-making regarding therapeutic approaches in end-stage kidney disease.

An evident trend emerges with a greater number of patients opting for PD in 2022/2023 compared to the years 2013/2014. Furthermore, the reasons of choosing PD in 2022 is different since in 2014 the fear of infections prevailed in these patients. This trend reflects the strengthening of the capabilities of multidisciplinary teams following the reorganization of consultations, where all available therapeutic modalities are presented, and also allows the demystification of pre-existing prejudices. This change is advantageous because it allows therapeutic individualization based on the patient's characteristics and their social context, thus providing an informed and knowledgeable population regarding therapeutic modalities.

When assessing differences among patient groups, it is evident that conservative medical treatment was chosen only for the more recently evaluated group. This can be justified by the increased life expectancy of patients evaluated in the consultation, with a higher number of comorbidities, making conservative treatment the more viable therapeutic option. In shifting the paradigm towards prioritizing the quality of life for patients over the quantity of life, emphasis has been placed on the significance of conservative medical treatment in managing patients for whom dialytic interventions would be more detrimental. At our department, in 2022 a multidisciplinary conservative care dedicated team was created to give the patients a real path on this option, composed by specialized and dedicated professionals. It is worth noting that it still has a relatively smaller expression in the group evaluated since October 2022, contrary to the national pattern of the CKD registry (2). This may be justified by the still high

proportion of patients assessed in the consultation who did not respond to the questionnaire, possibly including those who opted for conservative treatment and may face greater limitations in responding to the questionnaire.

Despite the temporal gap among patient groups, the reasons for therapeutic choices were similar, reflecting inherent limitations in therapeutic modalities. Approximately half of the patients rated the consultation with the highest score, a crucial point as patient satisfaction is indicative of a comprehensive and careful clarification consultation, whose main objective is an informed and conscious choice regarding the kidney disease treatment modality.

## CONCLUSION

Patient satisfaction serves as a reflection of a comprehensive and careful clarification consultation, aimed at enabling an informed and conscious decision-making process regarding the choice of treatment for kidney disease. The improvement in the consultation process is evident in the increased sense of information and decision-making capacity reported by patients. The clarification consultation stands out as a crucial ally in the trajectory of these individuals. Furthermore, it is observed that, in the studied population, the temporal referral to clarification consultations aligns with the recommended guidelines. This adherence does not compromise the natural course of therapeutic guidance for these patients, aiming to facilitate optimal disease management.

In conclusion, patients appear to be more conscious and informed about available therapeutic modalities, including PD and conservative medical treatment, underscoring the significance and purpose of a multidisciplinary, patient-centered clarification consultation. The enhanced awareness and empowerment experienced by patients signify the positive impact of refining the consultation process on their overall understanding and engagement in treatment decisions.

## Ethical Disclosures

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**ARR, FT, RVA, RE, PB and PS:** Bibliographical search, study design, data collection, analysis and interpretation of results, drafting and critical reviewing the content of the article. All authors approved the final version to be published.

## REFERENCES

1. Direção-Geral da Saúde. Tratamento Conservador Médico da Insuficiência Renal Crónica Estádio 5 . [accessed Jan 2024] Available at: [https://iasaude.pt/attachments/article/1348/circular\\_normativa\\_02\\_2012\\_tratamento\\_insuficiencia\\_renal.pdf](https://iasaude.pt/attachments/article/1348/circular_normativa_02_2012_tratamento_insuficiencia_renal.pdf)
2. Sociedade Portuguesa de Nefrologia. Gabinete do Registo da Doença Renal Crónica da Sociedade Portuguesa de Nefrologia. [accessed Jan 2024] Available at: <https://www.spnefro.pt/sociedade/gabinete-de-registo-de-doenca-renal-terminal>