Satisfaction of patients on chronic haemodialysis and peritoneal dialysis

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Summary

Background: In contrast to quality of life, patient satisfaction on chronic haemodialysis (HD) and peritoneal dialysis (PD) has only rarely been studied.

Patients and methods: All chronic HD and PD patients of the 19 centres located in western Switzerland were asked to complete a specific questionnaire, assessing dialysis centre characteristics, treatment modalities, and information received before and during dialysis treatment. Comparison between satisfaction with PD and HD was carried out on the patients in the nine centres offering both treatment modalities.

Results: Of the 558 questionnaires distributed to chronic HD patients, 455 were returned (response rate 82%). Fifty of 64 PD patients (78%) returned the questionnaire. The two groups were similar in age, gender, and duration of dialysis treatment. Completion rates were >90% for a ma-

jority of questions, with the lowest rate for information on sexuality (49% in HD and 54% in PD respectively). The lowest scores were recorded for information received about complications and costs of dialysis, and impact of end-stage kidney disease on sexuality. Satisfaction was lower in anonymous questionnaires. Satisfaction of PD patients was significantly better in 50% of the questions, particularly session tolerance (p <0.001), information about dialysis sessions (p = 0.007), and complications (p = 0.006).

Conclusions: PD patients were on average more satisfied with their treatment than HD patients. Satisfaction could be improved with more information about potential adverse treatment effects.

Key words: haemodialysis; peritoneal dialysis; patient satisfaction, questionnaire

Introduction

The evaluation of patients' satisfaction when dealing with chronic illnesses is an increasingly important domain. Firstly, patient satisfaction is associated with adherence to treatment regimens. Furthermore, patient satisfaction is also increasingly considered as an important outcome in its own right. For instance, it is one of nine key dimensions of quality addressed in the European Foundation for Quality Management's excellence model [1].

In contrast to quality of life, only few previous studies have addressed patient satisfaction with renal replacement therapy. In a peritoneal dialysis (PD) facility, determinants of patient satisfaction were shown to include the amount of information provided by the staff, the personal atmosphere of the facility, the efficiency of the delivery of dialysis supplies, and the availability of the primary nurse [2]. Among patients on haemodialysis (HD), patient satisfaction has been linked with adherence to dialysis treatment regimens [3], and with a favourable health outcome [4]. Only one questionnaire is specific for this patient population [5], but it is of considerable length, and exists only in English. A shorter form was recently used for comparing patient ratings of PD versus HD, seven weeks after treatment initiation, and showed better results for PD [6]. However, these last two instruments include different dimensions such as quality of life or patient preferences, and questions about satisfaction are only part of them. We therefore adapted a generic questionnaire for assessment of patient satisfaction applicable to both chronic HD and PD. The purpose of this study was to investigate the satisfaction with care experienced by patients on HD and PD, and to compare the dimensions shared by the two treatment modalities in centres offering both types of treatment.

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Patients and methods

Study population

Eligible subjects for this cross-sectional survey were all end-stage renal failure (ESRF) patients treated in all the dialysis centres (19 offering HD and 9 HD and PD) of Western Switzerland (population of about 1.8 million inhabitants), as part of a larger examination of quality of care in chronic dialysis [7]. Two centres treating only one patient each were not included in the present analysis. Each patient was asked to complete a questionnaire assessing dialysis centre characteristics, treatment modalities (nurses' and physicians' involvement, security and tolerance of treatment), and the information received before the initiation of dialysis treatment or later during dialysis care (drug treatment, side-effects, dietary restrictions, physical activity, sexuality, cost of care, contact in case of an emergency, and global satisfaction).

Questionnaires were distributed by the nursing staff, and the patients were asked to respond to the questions at home, and to return the questionnaire to the dialysis centre. Collection boxes were provided for the anonymous return of questionnaires. The patients had the possibility to fill in their name at the beginning of the questionnaire if they wanted to do so. After collection of the questionnaires at the foreseen date, no recall procedure was carried out. The protocol was approved by the research ethics committee of Lausanne and Geneva University Hospitals.

Questionnaire

Development of the questionnaire was carried out in 2 steps. First, patients and nurses in one dialysis centre offering HD and PD identified dimensions of satisfaction through a focus group, similar to the process reported by Bass et al. [8]. The identified dimensions were grouped into three chapters: access, dialysis care, and information received. Secondly, the relevant questions covering these dimensions were directly selected from the validated French version of the Sequs® data bank of questions for assessing patient satisfaction with outpatient care [9]. They included both "positive aspects of care", such as the benefits linked with treatment, as well as "negative aspects of care", such as side effects, costs and handicap. The only modification carried out was replacing the term "treatment" by "dialysis" in order to be more specific, and avoid confusion between dialysis sessions and other treatments, such as medications, often associated in these conditions. Response choices consisted of a five point Likert scale with the following response options: fully agree / rather agree / rather disagree / totally disagree, and a last option (not applicable or does not know). Patients also had the option of adding individual personal comments to each dimension and at the end of the questionnaire. The final form of the questionnaire, without the response scales, is displayed in the Appendix.

Adaptation of the questionnaire to PD was made by omiting all questions about access to the HD centre and HD sessions, except for a question about the outpatient visit facility.

Data analysis

Responses were coded with a value of 1 for "fully agree", 2 for "partially agree", 3 for "partially disagree", 4 for "totally disagree", and missing for "not applicable" or "does not know". Hence, the greater the agreement with a statement, the closer to 1 was the observed value. Computation of mean values and standard deviations were carried out after exclusion of "not applicable" or "does not know" responses, to keep only interpretable answers. Categorical variables were compared with the chi-square test and continuous variables with the Mann-Whitney U or Student's t-tests. Analyses were carried out on the whole set of responses for computing question completion rates. We computed Cronbach's alpha coefficients to assess the internal consistency of domain-specific scales [10]. Multiple correlations were carried out with Spearman's correlation coefficients in order to detect potentially redundant questions. The results for each specific centre were compared to the overall mean. Results were then analyzed by dialysis treatment modality.

Comparison between HD and PD results was carried out on the 335 HD patients and 50 PD patients from the nine centres offering both treatment modalities. We used a generalized linear mixed model for ordinal response treating centres as a random effect, and age, gender, duration of dialysis treatment, as well as type of treatment as fixed effects [11]. Satisfaction scores were recoded as 0 for "fully agree", 1 for "partially agree", and 2 for "partially disagree" or "totally disagree". Using the "gllamm" procedure of STATA [12], models were constructed using c-variables values centered for the mean for age, and duration of treatment, and binary values for gender (female = 1, male = 0), and treatment modality (PD = 1, HD = 0). The reference patient was a 64-year old man, on HD for 8 years. For the 24 models analyzed, negative regression coefficients and z values indicate better satisfaction for PD patients as compared with HD patients. Statistical significance was defined as a p value <0.05.

Results

Centres treated a median of 24 HD patients (range 6–68), and were equipped with a median of 10 dialysis beds (range 3–26, total 190). In the nine units performing PD, a median of 6 PD patients (1–20, total 64) were treated per centre.

Of the 558 questionnaires distributed to chronic HD patients, 455 were returned (response rate 82%), of which only 127 (28%) were submitted anonymously. This response rate ranged from 55.6% to 100% among centres, with a median 92.9%. For PD patients, of the 64 questionnaires distributed, 50 were returned (response rate 78%), of which 17 (34%) were anonymous. The response

rate ranged from 50% to 100% for the nine centres under study, with a median of 90%. Almost all patients (98%) were Caucasian. HD and PD patients were not statistically different with respect to age (64 ± 15 vs. 60 ± 17 years), gender (male gender 63% vs. 55%), and duration of dialysis treatment (4.0 ± 4.5 vs. 3.2 ± 4.9 years). These participants' characteristics were also similar to those of the whole dialysis population treated in the study's dialysis centres, and no differences were observed among the different centres.

Altogether, the questionnaire was well accepted, as completion rates per question were

Table 1		Question completion		· · ·	(SD)	Distribution by response categories (%)					
Distribution of responses to access to haemodialysis centres and dialysis sessions (n = 553).		rate (%) Mean	Lowest range	value (from 1 to 4*)		Very positive (score 1)	± positive (score 2)	± negative (score 3)	Very negative (score 4)	No opinion (score 5)	
	Transport facility	97.2	91.1	1.57	(0.67)	52.0	38.1	7.9	0.7	1.4	
	Transport time	94.3	84.6	1.48	(0.63)	57.3	35.7	3.9	1.2	1.9	
	Dialysis centre access	98.0	81.4	1.26	(0.51)	77.2	19.2	2.9	0.2	0.4	
	Parking facilities	90.4	93.0	1.66	(0.84)	43.6	26.6	7.7	3.9	18.2	
	Elevator access	93.4	55.8	1.28	(0.49)	58.5	19.7	0.9	0.2	20.6	
	Wheel chair availability	77.0	15.8	1.38	(0.60)	39.8	16.8	2.0	0.6	40.9	
	Opening time	96.9	20.0	1.32	(0.48)	68.4	29.3	0.9	1.4	0.0	
	Choice of dialysis day	96.9	88.9	1.32	(0.54)	68.6	24.6	2.7	0.2	3.8	
	Choice of dialysis period	95.0	80.8	1.36	(0.55)	64.3	28.1	2.5	0.2	4.8	
	Dialysis room organization	97.4	85.7	1.48	(0.67)	59.8	31.9	6.3	1.1	0.9	
	Armchair or bed installation	96.5	85.3	1.27	(0.49)	73.9	23.6	0.9	0.5	1.1	
	Entertainment	92.1	73.2	1.51	(0.73)	56.3	29.0	5.9	2.4	6.4	
	Choice of meal	94.5	76.5	1.35	(0.57)	66.4	24.5	3.5	0.5	5.1	
	Dressing room access	91.0	60.0	1.61	(0.82)	50.7	26.2	8.4	3.6	11.1	

* Taking into account only valid responses (= excluding score 5): the closer to 1, the better

Table 2		Haem	odialysis ((n = 553)			Peritoneal dialysis (n = 50)				
Distribution of responses to assess- ment of dialysis care, by type of dialysis.		Mean value	(SD)	Question com- pletion rate (%)		No opinion	Mean value	(SD)	Question com- pletion rate (%)		No opinion
		(from 1 to 4*)	*)	Mean	Lowest range	(%) (score 5)	(from 1 to 4*)		Mean	Lowest range	(%) (score 5)
	Nursing care	1.19	(0.44)	97.8	90.0	0.0	1.08	(0.27)	100.0	100.0	0.0
	Medical care	1.27	(0.54)	96.5	80.8	0.0	1.24	(0.48)	100.0	100.0	0.0
	Involvement in decisions	1.63	(0.87)	90.2	50.0	9.5	1.33	(0.69)	100.0	94.4	2.0
	Frequency of medical visits	1.39	(0.66)	96.7	90.0	1.4	1.14	(0.35)	100.0	100.0	0.0
	Ease of access to medical advice	1.44	(0.64)	93.4	44.4	17.3	1.29	(0.55)	98.0	60.0	14.3
	Respect of privacy	1.27	(0.60)	94.7	80.0	5.1	1.06	(0.24)	100.0	100.0	0.0
	Access to laboratory tests results	1.42	(0.69)	92.1	55.6	15.7	1.31	(0.53)	90.0	50.0	22.2
	Perceived security of dialysis sessions	1.20	(0.44)	96.5	88.6	1.8	1.10	(0.30)	100.0	100.0	0.0
	Tolerance of dialysis sessions	2.16	(0.76)	95.4	85.7	1.4	1.51	(0.51)	100.0	100.0	2.0

* Taking into account only valid responses (=excluding score 5): the closer to 1, the better

above 90% for 17 out of 39 questions in HD and 19 out of 26 questions in PD, and above 80% for an additional 6 and 5 questions, respectively. The lowest question completion rates were recorded for the question about receiving information on sexual activity (49% in HD, and 54% in PD, respectively). Responses were distributed in all four grades of response categories. The only exception was nursing care, for which no patient used the most negative response option. An apparent ceiling effect (all patients giving the highest score to a given question) occurred only in one centre, treating six patients, who may have had concerns about anonymity. Internal consistency, as measured with

Distribution of responses to assessment of information received, by type of dialvsis.

	Haemodialysis (n = 553)					Peritoneal dialysis (n = 50)				
	Mean (SD) value (from 1 to 4*)		Question com- pletion rate (%)		No opinion (%) (score 5)	Mean value	(SD)	Question com- pletion rate (%)		No opinion (%) (score 5)
			Mean Lowest range			(from 1 to 4*)		Mean Lowest range		
Dialysis possibilities	1.43	(0.68)	96.9	82.9	4.3	1.20	(0.46)	100.0	94.4	2.0
Dialysis sessions	1.33	(0.60)	96.7	83.3	1.6	1.14	(0.35)	100.0	94.4	2.0
Dialysis complications	1.62	(0.79)	95.4	73.7	6.0	1.35	(0.56)	100.0	88.9	4.0
Information to family	1.59	(0.82)	89.3	57.9	11.0	1.50	(0.79)	92.0	60.0	4.3
Drug treatment	1.37	(0.58)	95.8	84.6	1.1	1.29	(0.50)	98.0	88.9	2.0
Drug treatment complications	1.68	(0.78)	93.9	73.7	5.1	1.67	(0.74)	94.0	50.0	4.3
Laboratory tests results	1.39	(0.66)	97.8	83.3	2.0	1.23	(0.43)	96.0	83.3	2.1
Confidentiality of discussions about health	1.57	(0.85)	95.6	88.9	2.1	1.15	(0.42)	94.0	80.0	2.1
Food restrictions	1.33	(0.61)	97.4	88.4	2.0	1.33	(0.60)	94.0	80.0	2.1
Physical activity	1.74	(0.94)	93.0	55.6	12.9	1.55	(0.74)	94.0	60.0	10.6
Sexual life	2.41	(1.23)	85.1	26.3	43.4	1.93	(1.24)	78.0	25.0	30.8
Drug reimbursement	1.66	(0.95)	92.8	61.9	10.8	1.50	(0.88)	92.0	50.0	4.3
Treatment costs	1.76	(0.97)	94.1	61.5	10.7	1.74	(0.98)	94.0	50.0	8.5
Emergency contact	1.39	(0.76)	96.5	84.6	0.7	1.12	(0.48)	100.0	100.0	2.0
Global satisfaction	1.20	(0.43)	97.6	88.9	0.0	1.10	(0.36)	100.0	100.0	2.0
Recommendation of centre to family	1.13	(0.42)	97.6	84.2	2.2	1.06	(0.25)	96.0	88.9	2.1

* Taking into account only valid responses (= excluding score 5): the closer to 1, the better

Cronbach's alpha, ranged between 0.77 (dialysis centre characteristics) and 0.89 (patient information) for HD patients and between 0.72 (patient care) and 0.94 (patient information) for PD patients.

The correlation coefficients between the different questions were always smaller than 0.50, except for questions regarding day and time of dialysis treatment (r = 0.67), modality of transportation and transportation time (r = 0.59), medical care and frequency of medical visits (r = 0.55), dialysis room organization, and armchair or bed installation (r = 0.51),

Finally, three correlations were of moderate importance (i.e. between 0.30 and 0.50): between information about dialysis possibilities and dialysis complications (r = 0.48); between information about drug treatment and complications of drug treatment (r = 0.43); and between global satisfaction and centre recommendations to family (r = 0.38). Altogether, there were no statistically significant differences in the distribution of results among the 19 different HD centres or the 9 PD centres.

Findings about dialysis centre access and other facility attributes are displayed in table 1. Question completion rates varied greatly depending on the specific question, as all questions did not apply to all patients. Some patients chose not to answer questions that were not applicable to them, while others responded by checking "not applicable" or "does not know". In general, the questions for which there were the greatest amount of missing data were also those for which there was the highest frequency of responses of "not applicable or does not know", translated into "no opinion" in the tables.

The distribution of responses about dialysis care for HD and PD is displayed in table 2, and about satisfaction with the receipt of health information in table 3. "Positive" information was rated higher than "negative" information, such as information about dialysis complications, drug treatment complications, restrictions of physical activity or particularly sexuality, and cost of treatment. Globally, satisfaction of PD patients was rated higher than satisfaction of HD patients, and anonymous responses were on average lower rated than signed ones: our HD patients who chose to remain anonymous were up to 13% less satisfied than those who signed their questionnaire. This difference also existed in PD patients, with patients who chose to remain anonymous being up to 24% less satisfied.

Table 4

Difference between haemodialysis and peritoneal dialysis in the 9 centres offering both treatment modalities (mixed model)

Regression model	Regression coefficient	SE	Z-test	p value
Nursing care	-1.295	0.780	-1.660	0.097
Medical care	-0.445	0.527	-0.840	0.398
Involvement in decisions	-1.264	0.526	-2.400	0.016
Frequency of medical visits	-1.541	0.585	-2.630	0.008
Ease of access to medical advice	-1.304	0.551	-2.370	0.018
Respect of privacy	-2.073	1.052	-1.970	0.049
Access to laboratory tests results	-1.356	0.588	-2.310	0.021
Perceived security of dialysis sessions	-0.859	0.673	-1.280	0.202
Tolerance of dialysis sessions	-1.884	0.422	-4.460	< 0.001
Information about dialysis possibilities	-1.464	0.584	-2.510	0.012
Information about dialysis sessions	-1.796	0.667	-2.690	0.007
Information about dialysis complications	-1.313	0.479	-2.740	0.006
Information to family	-0.401	0.429	-0.930	0.351
Information about drug treatment	-0.548	0.466	-1.180	0.240
Information about drug treatment complications	-0.630	0.415	-1.520	0.129
Information about laboratory tests results	-0.694	0.453	-1.530	0.125
Confidentiality of discussions about health	-1.753	0.650	-2.700	0.007
Information about food restrictions	-0.168	0.458	-0.370	0.714
Information about physical activity	-1.132	0.462	-2.450	0.014
Information about sexual life	-1.179	0.593	-1.990	0.047
Information about drug reimbursement	-0.290	0.415	-0.700	0.485
Information about treatment costs	-0.400	0.418	-0.960	0.338
Global satisfaction	-2.026	1.042	-1.940	0.052
Recommendation of centre to family	-0.867	0.796	-1.090	0.276

Comparison of satisfaction between HD and PD patients of the 9 centres offering both treatment modalities are displayed in table 4. Among the covariables, age played a significant role in 4 models (frequency of medical visit [p = 0.025], ease of access to medical advice [p = 0.034], confidentiality of discussion about health [p = 0.022], and information about costs [p = 0.008]), younger patients being more satisfied than older patients. Similarly, women were statistically significantly more satisfied than men as to the tolerance of dialysis sessions (p = 0.034), information about dialysis sessions (p = 0.041), and were more willing to recommend the centre to relatives (p = 0.035). Pa-

tients on dialysis for a shorter time were statistically more satisfied about information on food restriction (p = 0.044), physical activity (p = 0.039), and costs (p = 0.022). Statistically significant differences between HD and PD patients were observed in 12 of the 24 models tested. All were in favour of PD (negative coefficients), and of greater magnitude than the differences observed on the other co-variables. The most important one was about tolerance of dialysis session (p < 0.001), followed by information about complications, dialysis session, and confidentiality of discussion about health. Detailed results are displayed in table 4.

Discussion

This study demonstrated that on average, patient satisfaction with care on chronic dialysis, as recorded with the validated Sequs[®] data bank of questions, was better on PD than on HD, but not homogenous across the different dimensions included in the study questionnaire, and was associated with patient characteristics.

Patient satisfaction with the "negative" aspects of dialysis care, such as information about complications, costs, or daily restrictions, was lower than satisfaction with "positive" aspects, such as nursing or medical care, or information about dialysis sessions, or emergency contact. However, information should be provided along all these dimensions, if physicians and nurses caring for these patients want to provide better care. The distribution of responses across the different response categories was highly variable according to the specific question. The response distribution to the question about tolerance to dialysis sessions, which showed the second worst score was striking. The question on information about sexual function was also remarkable for its low question completion rate, despite many patients stating that they wanted, but did not receive information on sexuality. Globally however, patients were satisfied with their dialysis treatment and the information provided to them.

This study also showed that tolerance of dialysis treatment was a major concern for these patients, and was 30% better rated in PD than in HD. Altogether, PD patients were more satisfied, and seemed to be more involved in their treatment than HD patients. These results are in agreement with those recently published with the CHOICE questionnaire, comparing patient ratings seven weeks after dialysis initiation, which showed that PD patients were more likely to give excellent ratings of dialysis care and specific aspects of care than HD patients [6]. In our study, this observation proved to be long term, as mean treatment duration was 4.0 and 3.2 years in HD and PD patients, respectively.

In addition, our results confirmed that providing information to patients is a difficult task that must be tailored to patients' need, and take into account the fact that patients do not always feel comfortable voicing their needs and concerns, as anonymous responses were on average lower rated than signed ones.

Centre characteristics are also likely to play a role in patient satisfaction. It is well known that practice variations exist in all fields in medicine and can have an important impact on patient outcome [13]. Similarly, nephrologists have various opinions and practice about the value and the usefulness of exercise counselling [14]. Therefore, if patient satisfaction is to be addressed optimally, information should always be available, preferably in written form, so that it can be provided whenever the patient requests it. This can prove difficult in countries with patients of different ethnicities and levels of education. Our results clearly showed room for improvement in this domain.

Few data have been reported about patient satisfaction with dialysis care. Emphasis has been given to psychosocial factors [4, 15, 16], and their association with compliance and outcome. Depression has been identified as the most common psychiatric disorder in dialysis patients [4, 15]. In end-stage renal disease, no association between satisfaction with care and level of depression has been identified [3], but satisfaction with nephrologists care was clearly correlated with physician attendance at dialysis sessions, as well as with the perception of social support, and indicators of quality of dialysis, such as measurement of protein catabolic rate, and serum albumin concentration [3]. All these results indicate that optimal care of these patients must be interdisciplinary.

Our study has a number of limitations. Firstly, it was designed to be an anonymous prevalence study and used only satisfaction data, for which no gold standard exists. As a consequence, no systematic analysis could be performed that included case-mix variables, process of care variables, such as time after dialysis initiation, or outcome variables, such as adequacy of dialysis, which all were found to have an impact both on physical and emotional dimensions of quality of life as assessed by SF-36 questionnaire [17], or on satisfaction with care as mentioned above [3]. Secondly, it included some dialysis centres with very few patients, which may have biased answers for fear of loss of anonymity. However, this bias seemed to be rather limited, and was clearly noticeable only in one centre treating six patients only. Finally, as our study was a prevalence study, it cannot be excluded that modality selection influenced the results as more independent patients might be over-represented in PD.

As compared with other instruments such as the CHOICE study questionnaire with its 21 dimensions and 83 questions [5], our instrument assessed only 3 dimensions covering patient satisfaction with dialysis centre characteristics, dialysis sessions course, and information. As a consequence, the results obtained from the two types of instruments cannot be compared. However, as our instrument's development involved patients and dialysis nurses for the selection of questions to be included, it should closely reflect their preoccupations, which sometimes can be specific to our health care system. Adaptation to another health care system's characteristics might be required, but this limitation also applies to other existing instruments such as the KDQol [5].

In conclusion, because it showed heterogeneous responses between patient characteristics and the different dimensions of satisfaction, this questionnaire could be a promising surveillance tool for dialysis patients. It was well accepted, easy to use, and responsive in our HD and PD population. Its results allow each individual dialysis centre to set up corrective and preventive measures aimed at improving patient satisfaction with care in very specific domains. The very high response rate recorded in this study was also encouraging. It showed that patients were willing to participate in this kind of survey.t As a consequence, it could be extended to other dialysis centres.

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Appendix

Questionnaire on satisfaction of patients on haemodialysis: About our dialysis centre

- 1. Which kind of transportation do you use to access the dialysis centre? Private car: (driver, passenger)/Bus/Taxi/Volunteer driver/Handicap transport organization/other:
- 2. This kind of transportation is convenient for you
- 3. The time it usually takes you to go from your home to the dialysis centre is ... minutes.
- 4. This time is convenient for you
- 5. Our dialysis centre is easily accessible
- 6. The parking facilities are convenient
- 7. The elevator access is convenient
- 8. The equipment for the persons who need help to move (eg: wheelchair) is convenient

- 9. The opening hours of the centre are convenient
- 10. The possibilities of selecting the dialysis days are convenient
- 11. The possibilities of selecting the dialysis periods (during the day) are convenient

About your environment during your dialysis sessions

- 12. The fitting of the dialysis room is convenient
- 13. In case of a negative answer, which aspects should be improved? The space at disposal / the resting area / the room temperature / the room lighting / the noise level / other aspect:
- 14. The installation in the armchair or in the dialysis bed is convenient
- 15. The means to entertain you during the sessions (TV, magazines, etc) meet your expectations

- 16. The light meal which is served to you meets your expectations
- 17. The dressing room access (showers) is convenient

About your haemodialysis sessions

- 18. Do you think the nursing staff take care of you adequately?
- 19. In case of a negative answer, which aspects should be improved?

The time to listen to you/ The opportunity to ask questions / The attention given to your disease / The attention given to your pain / The attention given to your opinion / Other elements

- 20. Do you think the medical staff take care of you adequately?
- 21. In case of negative answer, which aspects should be improved?

The time to listen to you / The opportunity to ask questions / The attention given to your disease / The attention given to your pain / The attention given to your opinion / Other elements

- 22. You could participate in the decisions when you wanted to
- 23. You are satisfied with the frequency of the medical visits
- 24. You could obtain a personal appointment with the physician when you wanted to
- 25. Your intimacy was respected during the visit and/or the clinical examination
- 26. You could access your medical records when you wanted to
- 27. The security conditions of your dialysis sessions seem appropriate
- 28. Your tolerance of the dialysis sessions (cramps, blood pressure drops, and tiredness) is good
- 29. What are your suggestions for improving your care in dialysis?

About the information you received

Before the initiation of dialysis therapy

- 30. The information you received about the dialysis possibilities (peritoneal dialysis, haemodialysis, and transplantation) was adequate
- The information about the course of your dialysis sessions was adequate
- The information you received about the potential complications of your dialysis was adequate
- 33. The information given to your family about your health problem and your treatment was adequate

These last weeks/months

- 34. The information you received about your drug treatment was adequate
- 35. The information you received about the potential complications of your drug treatment was adequate
- 36. The information you received about the results of your laboratory tests was adequate
- 37. The information you received about your medical condition was transmitted to you discreetly, without anybody listening
- 38. The information you received about diet restrictions was adequate
- 39. The information you received about physical activities was adequate
- 40. The information you received about sexual life was adequate
- 41. The information you received about the reimbursement of your drugs was adequate
- 42. Did you have to give up taking a drug because of its price? If yes, which one?
- 43. The information you received about the cost of your treatments was adequate
- 44. Do you know whom to contact in case of an emergency?
- 45. Are you globally satisfied with your dialysis care?
- 46. Would you recommend our dialysis centre to someone suffering from the same disease?
- 47. How could we improve our care of you?

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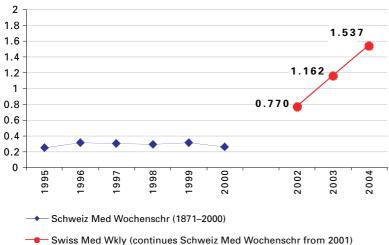
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