www.bdd.rdplf.org Volume 6, n° 2, July 2023
https://doi.org/10.25796/bdd.v6i2.79033
ISSN 2607-9917

Bulletin de la Dialyse à Domicile

RDPLF 2022 annual report: Profile of home hemodialysis patients in Belgium and France (synthetic raw results)

(Rapport annuel RDPLF 2022 : profil des patients en en hémodialyse à domicile en Belgique et France, résultats bruts et synthétiques)

Christian Verger et Emmanuel Fabre

Registre de dialyse péritonéale et hémodialyse à domicile de langue française (RDPLF, Pontoise (France)

To cite : Verger C, Fabre E. RDPLF annual report: Profile of peritoneal dialysis patients in France in 2022 synthetic raw results. Bull Dial Domic [Internet]. 6(1):41-49. Available from: https://doi.org/10.25796/bdd.v6i1.77293

Note : cette publication est bilingue. Le texte français est disponible à la même URL : https://doi.org/10.25796/bdd.v6i2.79033

Summary

We present primary descriptive data in the form of tables and graphs for patients treated with home hemodialysis in France and French-speaking Belgium in 2022. These data were recorded in the database of the French-speaking Register of Peritoneal Dialysis and Home Hemodialysis (RDPLF).

The average age of the patients is similar in both countries: 52.7 years in France and 54.7 years in Belgium. The percentage of patients with diabetes is 25.6% in Belgium and 18.5% in France.

The majority of patients undergo daily hemodialysis 5 to 7 times per week.

Of the patients, 11% have received peritoneal dialysis in the past. Of these, 23.5% transitioned to home hemodialysis less than 3 months after stopping peritoneal dialysis, while 23.6% transitioned after 2 years of center-based or self-administered hemodialysis.

Practices differ between Belgium and France. In Belgium, a central catheter is used in 57.5% of cases, compared to 8.5% in France. For arteriovenous fistula puncture, the buttonhole technique is used in 91% of cases in Belgium and 47.8% of cases in France.

In Belgium, 70% of patients dialyze independently, while in France, 71% of patients dialyze in the presence of a family member.

The main cause of treatment discontinuation is transplantation (44% of technical dropout).

Mots clés : Registre, RDPLF, hémodialyse à domicile, France, Belgique, rapport annuel .

Résumé

Nous présentons sous forme de tableaux et graphiques uniquement les principales données descriptives des patients traités par hémodialyse à domicile en France et Belgique francophone en 2022 et enregistrés dans la base de données du registre de dialyse péritonéale et hémodiayse à domicile de langue française (RDPLF).

L'âge moyen est proche dans les deux pays, 52,7 ans en France et 54,7 ans en Belgique. Le pourcentage de diabétique est plus élevé en Belgique (25,6%) qu'en France (18,5%).

La majorité des patients sont traités par hémodialyse quotidienne 5 à 7 fois par semaine.

11% des patients ont un antécédent de traitement par dialyse péritonéale : parmi eux 23,5% ont été transférés en hémodialyse à domicile moins de 3 mois après l'arrêt de dialyse péritonéale, et 23,6% après 2 ans d'hémodialyse en centre ou autodialyse.

La Belgique et la France diffèrent dans leurs pratiques. En Belgique un cathéter central est utilisé dans 57,5% des cas et seulement 8,5% en France. La ponction de la fistule artérioveineuse utilise la technique du buttonhole dans 91 % des cas en Belgique et dans 47,8% des cas en France.

En Belgique 70% des patients se dialysent **seuls** alors que 71% des patients français se dialysent en présence d'un membre de la famille.

La principale cause d'arrêt de traitement est la transplantation (44 % des sorties de technique).

Keywords: Registry, RDPLF, home hemodialysis, France, Belgium, annual report.

www.bdd.rdplf.org Volume 6, n° 2, July 2023
https://doi.org/10.25796/bdd.v6i2.79033
ISSN 2607-9917

INTRODUCTION

The aim of this document is to summarize in graphic form the main descriptive elements obtained from the database of the Register of Peritoneal Dialysis and Home Hemodialysis (RDPLF) in French-speaking Belgium (Dutch-speaking Belgium does not participate in the Home Hemodialysis Register) and France (metropolitan France and overseas departments and territories) in 2022. No discussion is planned in this report, which is intended above all to provide basic documentation for dialysis teams to illustrate their own work or presentations. An identical presentation was adopted for peritoneal dialysis in our last issue [1]. The original slides can be obtained from the RDPLF secretariat.

These tables and graphs may be freely copied, provided that the present document is cited with its DOI. The originals can also be obtained as PowerPoint files from the RDPLF secretariat.

EXHAUSTIVENESS

Taking as a reference the Réseau Epidemiologie Information en Néphrologie (REIN) [2], which is exhaustive for France, the number of patients treated by home hemodialysis (HDD) and registered in the RDPLF represents around 45% of the total number of French patients treated by home hemodialysis. In comparison, 98% of peritoneal dialysis (PD) patients are included in the RDPLF. In Belgium, only French-speaking centers (Wallonia) participate in the HDD register of the RDPLF: taking the GNFB report [3] as a reference, the completeness of the RDPLF for Wallonia is 91%.

DESCRIPTION OF THE POPULATION

Number of prevalent patients in 2022 (treated at least 1 day): 573 patients (181 in Belgium and 392 in France); their profile is summarized in *Table I and II*.

Table I. Profile of patients treated with home hemodialysis in 2022 followed in the RDPLF

	Men	Women	Median age (Min-Max)	Diabetes
Belgium	68.5%	31.5%	54.7 ans (14.5-91.3)	25.6%
France	67.3%	32.7%	52.7 ans (17.7-84.2)	18.5%

Table II. Nephropathies monitored in the RDPLF in 2022 in patients treated with home hemodialysis

Nephropathy	Belgium	France	Nephropathy	Belgium	France
Vascular	12.5%	10.1%	System desease	4.0%	2.1%
Congenital	4.0%	1.1%	Malformative	8.5%	8.0%
Diabetes	14.8%	10.1%	Drug-induced	2.3%	1.9%
Glomerular	11.9%	27.1%	Cystic fibrosis	14.2%	12.5%
Uncertain	6.8%	9.8%	Alport-Syndrome	1.7%	1.3%
Cardiac failure	2.8%	0.3%	Tumoral	1.1%	4.0%
Interstitial	6.2%	5.1%	Others	9.1%	6.6%

journal officiel du Registre de Dialyse Péritonéale de Langue Française RDPLF www.rdplf.org

www.bdd.rdplf.org Volume 6, n° 2, July 2023
https://doi.org/10.25796/bdd.v6i2.79033
ISSN 2607-9917

Pre-home hemodialysis treatment

Table III summarizes the treatment modality prior to home hemodialysis, but this does not preclude a different one prior home hemodialysis treatment. In the case of hemodialysis or transplantation, patients may have been previously treated with PD. This table should therefore be compared with the following *(Table IV)*.

⬇*Table II/. Treatment before home hemodialysis: this is the treatment immediately preceding*

Pre-home hemodialysis treatment	Belgium	France
Peritoneal dialysis	7.8%	4.6%
In center or self hemodialysis	62.7%	71.2
Not dialysed	16.6%	11.3
Transplantation	13.9%	12.9

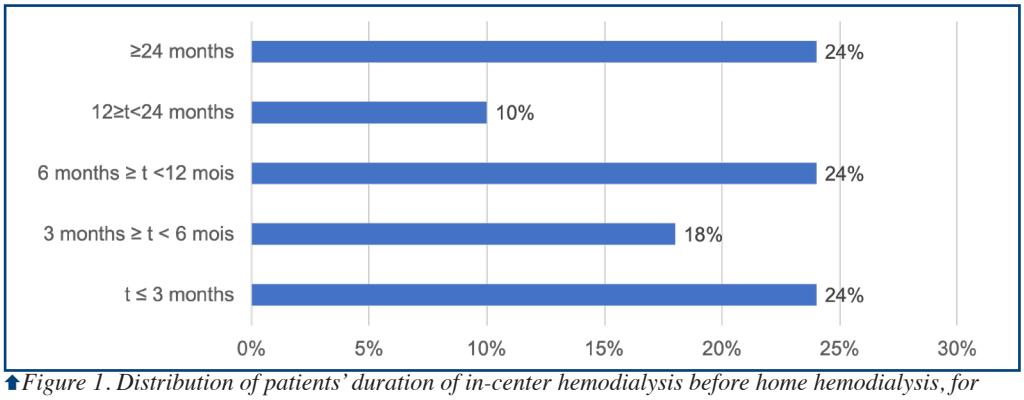
History of peritoneal dialysis before home hemodialysis

Sixty-four patients (11.7%) of the 573 patients treated by home hemodialysis in 2022 had previously been treated by peritoneal dialysis (PD). This percentage is higher than that shown in Table II, as it includes patients who have had other treatment in the meantime (in-center hemodialysis or transplantation): the way the data are entered into the system means that it is not possible to know the exact path taken by patients who have changed treatment modality several times between PD and HDD.

⬇*Table IV. Causes d'arrêt de DP des patients ultérieurement hémodialysés à domicile*

Causes of PD stops	Number	Percentages
Diuresis recovery	1	1.7%
Transplantation	12	20.3%
Peritonitis	5	8.4%
PD catheter problems	4	6.7
Insufficient dialysis/UF	21	35.6%
Malnutrition	1	1.7%
Psychological intolerance	6	10.2%
Others not related to PD	8	13.6%
Diaphragmatic breach	1	1.7%

The duration of in-center hemodialysis and/or limited care self-dialysis treatment after cessation of peritoneal dialysis and before home hemodialysis treatment varies widely. (*figure 1*) :



⬆*Figure 1. Distribution of patients' duration of in-center hemodialysis before home hemodialysis, for patients who were transferred from peritoneal dialysis to in-center hemodialysis before being treated with home hemodialysis.*

www.bdd.rdplf.org Volume 6, n° 2, July 2023
https://doi.org/10.25796/bdd.v6i2.79033
ISSN 2607-9917

HOME HEMODIALYSIS PRACTICES

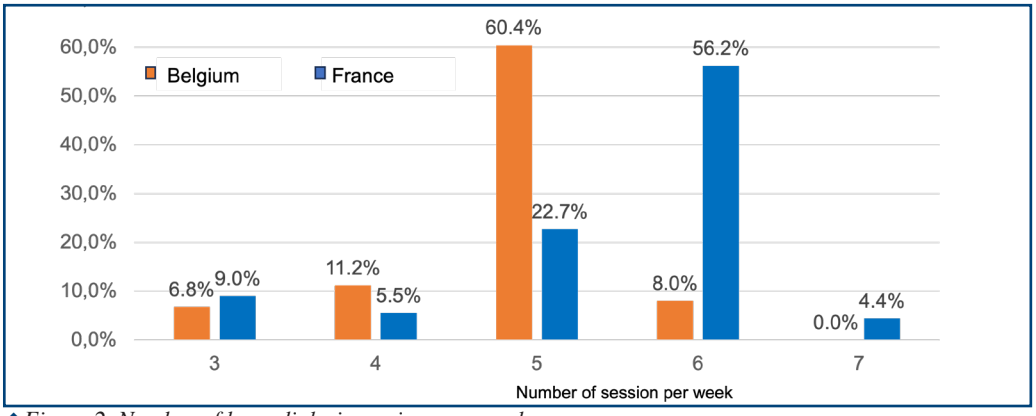


Figure 2. Number of hemodialysis sessions per week.

MONITORING OF DIALYSIS SESSIONS

- In Belgium, the patient monitors the session alone in 70% of cases.
- In France, 71% of sessions are monitored by the family.

VASCULAR ACCESS

Table V. Duration per session by number of home hemodialysis sessions per week (Belgium and France have been grouped together as there is no significant difference).

Number of session per week	Duration of each session	Total/ weekly
3	240	12 h
4	180	12 h
5	150	12,5 h
6 ou 7	120	12 to 14 h

Table VI. Vascular access used in home hemodialysis patients

Vascular access	**Belgium**	**France**
Double lumen central catheter	57.8%	8.5%
Arteriovenous fistula	42.2%	91.5%

Table VII. Types of arterio-venous fistula.

Type of fistula	**Belgium**	**France**
Classical	8.8%	52.2%
Buttonhole	91.2%	47.8%

IN-CENTER HEMODIAYSIS RESPITE

The cumulative duration of treatment in 2022 in the cohort monitored was 154361 days; the cumulative number of days of in-center respite, all causes combined, was 7889 days, i.e. 17.5 days of in-center withdrawals per patient-year of home hemodialysis treatment. The figure is identical in Belgium and France

journal officiel du Registre de Dialyse Péritonéale de Langue Française RDPLF www.rdplf.org

www.bdd.rdplf.org Volume 6, n° 2, July 2023
https://doi.org/10.25796/bdd.v6i2.79033
ISSN 2607-9917

HOME HEMODIALYSIS DISCONTINUATION

-One hundred and thirty patients discontinued home hemodialysis treatment in 2022, in the cohort monitored by the RDPLF: 48 in Belgium and 82 in France. Taking the two countries together, the breakdown of reasons for leaving the technique is summarized in figure 3, and the causes of transfer in figure 4.

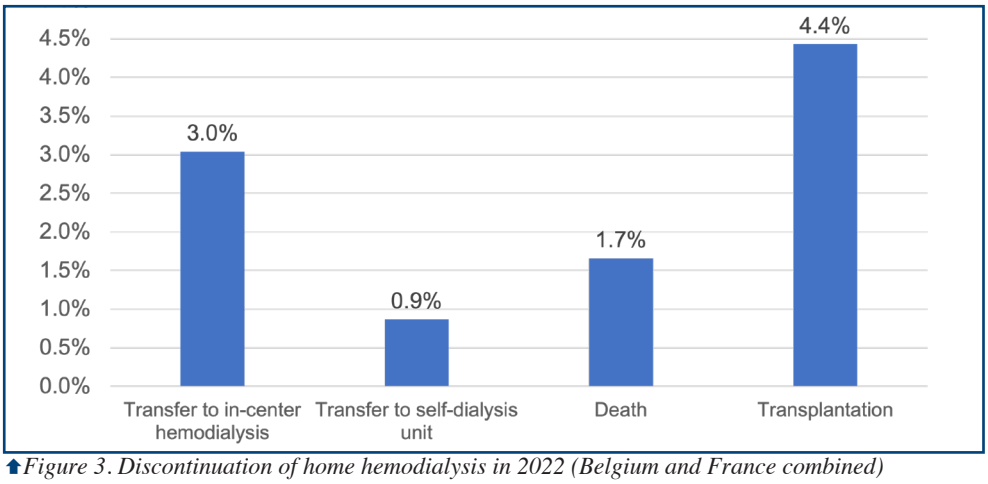


Figure 3. Discontinuation of home hemodialysis in 2022 (Belgium and France combined)

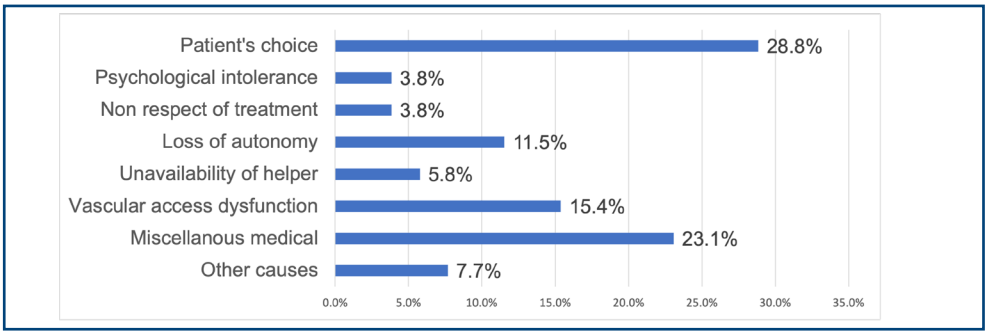


Figure 4. breakdown of reasons for transfering to in-center hemodialysis or self-dialysis

REFERENCES

1 - Verger C, Fabre E. RDPLF annual report: Profile of peritoneal dialysis patients in France in 2022 synthetic raw results. Bull Dial Domic [Internet]. 6(1):41-49. Available from: https://doi.org/10.25796/bdd.v6i1.77293

2- Lassale M. and Couchoud C. REIN annual report 2019 [Internet]. Available at : https://www.agence-biomedecine.fr/IMG/pdf/rapport_rein_2019_2021-10-14.pdf

3 - Rapport annuel d'activité des centres 2022 du GNFB (Groupement des Néphrologues francophones de Belgique). https://www.gnfb.be/
Réunion annuelle « registre et peer-review » du GNFB, 23 mai 2023, Wavre (communication personnelle Frédéric Collart).

Role of authors : CV wrote the text and performed the analyses. EF designed the database software and is in charge of its managment.

journal officiel du Registre de Dialyse Péritonéale de Langue Française RDPLF www.rdplf.org

www.bdd.rdplf.org Volume 6, n° 2, July 2023
https://doi.org/10.25796/bdd.v6i2.79033
ISSN 2607-9917

Funding: The RDPLF operates independently thanks to grants from non-profit home dialysis associations and laboratories. Funding sources are available on the RDPLF website: https://www.rdplf.org/financement.html. The authors have not been personnaly funded for this report.

Peer reviewing : The numbers, tables and figures in this document are raw data extracted from the database, without interpretation, to be used by readers as a starting point for generating research topics. As they are raw descriptive data without discussion, they have not been double-blinded by external reviewers, but have been reread and corrected by 3 members of the editorial board.

Acknowledgments: We would like to extend our warmest thanks to the medical and nursing teams who regularly enter their data into the RDPLF database, and thanks to whom these data are available. We remain at their disposal to assist them in any work they may wish to undertake using the database. The list of home hemodialysis centers participating in the RDPLF is shown below (active centers as of 12/31/2022).

BELGIUM	Gradignan (C Nodimar)
	Haguenau (M Kribs)
Bruxelles (J Nortier)	Hyeres (H Van Der Pijl)
Bruxelles (A Clause)	La Roche Sur Yon (N Target)
Bruxelles (E Goffin)	La Rochelle (C Bachelet Rousseau)
Charleroi (T Ho)	Le Havre (L Boissinot)
Huy (M Milicevic)	Le Mans (G Seret)
Liege-Citadelle (C Bovy)	Lisieux (L Al Moussalla)
Liege-Citadelle (C Masset)	Lyon (F Chauvel)
Marche En Famenne (L Van Overmeire)	Marseille Conception (P Sebahoun)
Namur (M Tintillier)	Melun (F Pourcine)
	Montpellier (O Gilbert)
FRANCE	Narbonne (O Coldefy)
	Niort (A Sechet)
Albi (A Duhem)	Orleans (A Ganea)
Alencon (E Cardineau)	Paris (A Stancu)
Angers (T Ilinca)	Quimper (M Rifaat)
Angouleme (M Pujo)	Quincy Sous Senart (G Rostoker)
Ars Laquenexy (B Savenkoff)	Reims (E Canivet)
Avranches (V Leduc)	Rennes (E Laruelle)
Beauvais (J Faucher)	Reze (A Testa)
Bethune - Beuvry (N Chraibi)	Roanne (E N'Sembani)
Bievres (H Hebibi)	Saint Gilles Les Bains (N Panepinto)
Bordeauxd Ctmr St Augustin (A Pommereau)	Saint Lo (E Zagdoun)
Bordeaux (P Seniuta)	Saint Louis / La Reunion (E Seydou Toure)
Brest (E Chaffara)	Saint Nazaireq (S Durault)
Caen (C Castrale)	Saint Priest En Jarez (L Azzouz)
Caen (M Ficheux)	Saint Quentin (M Albadawy)
Chambery (J Philit)	Sainte Clotilde - (A Aizel)
Cholet (A Djema)	Saintes (H Bonarek)
Colomiers (A Pillet)	Toursq (A Girault-Lataste)
Douai (G Cardon)	Vandoeuvre Les Nancy (S Vallance)
Draguignan (K Ismail)	Vannes (M Akoha)
Dunkerque (R Azar)	Verdun (A Diarrassouba)
Evreux (A Bouffandeau)	Vichy (D Aguilera)
Flers (M Ficheux)	