## Frequent patient retraining at home reduces the risks of peritoneal dialysis-related infections : A randomised study

<sup>1</sup>Jae Hyun Chang, M.D., Ph.D

<sup>3</sup>Sue K. Park, M.D., Ph.D

<sup>4</sup>Sung Gyun Kim, M.D., Ph.D

<sup>2</sup>Soo Jin Kim, M.D.

<sup>2</sup>Dong Ho Shin, M.D.

<sup>5</sup>Young-Hwan Hwang, M.D., Ph.D

<sup>6</sup>Wookyung Chung, M.D., Ph.D

<sup>7</sup>Hyunwook Kim, M.D., Ph.D

Representing Trial on Education And Clinical outcomes for Home PD patients (TEACH)

Investigators

Corresponding Author;

Kook-Hwan Oh, MD, PhD.

Department of Internal Medicine, Seoul National University College of Medicine,

Chongno Gu, Seoul, 03080, Korea

Tel: +82-2-2072-0776, Fax: +82-2-741-4876

Email: ohchris@hanmail.net

JHC and JO equally contributed to this work.

<sup>1</sup>Department of Internal Medicine, Gachon University Gil Medical Center, Gachon University School of Medicine, Namdong Gu, Incheon, 21565, Korea

<sup>2</sup>Department of Internal Medicine, Kangdong Sacred Heart Hospital, Hallym Kidney Research Institute, Hallym University, Kangdong Gu, Seoul, 05355, Korea

<sup>&</sup>lt;sup>2</sup>Jieun Oh, M.D., Ph.D

<sup>&</sup>lt;sup>3</sup>Juyeon Lee, M.S.

<sup>&</sup>lt;sup>8</sup>Kook-Hwan Oh, M.D., Ph.D.

<sup>3</sup>Department of Preventive Medicine, Seoul National University College of Medicine, Seoul, Korea; Department of biomedical Science, Seoul National University College of Medicine, Seoul, Korea; Cancer Research Institute, Seoul National University, Chongno Gu, Seoul, 03080, Korea

<sup>4</sup>Department of Internal Medicine, Hallym University Sacred Heart Hospital, Dongan Gu, Anyang, Gyeonggi-do, 14068, Korea

<sup>5</sup>Department of Internal Medicine, Eulji University College of Medicine, Hangeul Biseok Ro, Seoul, 01830, Korea.

<sup>6</sup>Department of Internal Medicine, Gachon University Gil Medical Center, Gachon University School of Medicine, Namdong Gu, Incheon, 21565, Korea

<sup>7</sup>Department of Internal Medicine, Yonsei University College of Medicine, Gangnam Severance Hospitial, Kangnam Gu, Seoul, 06273, Korea

<sup>8</sup>Department of Internal Medicine, Seoul National University College of Medicine, Seoul, Korea

Supplementary Table 1. Contents for patient education and training

1. What does the kidney do in our body?	Location of the kidney
	• Functions of the kidney
	What if the kidney stops working
2. What is peritoneal dialysis?	• What is PD?
	• PD catheter insertion
	How is the water and waste removed?
	• Types of PD
3. Care of PD	•How PD fluid is exchanged?
	PD fluid exchange procedure
	• Exit care
	• Shower
	Water balance
4. Infectious complication	• Peritonitis
	Exit site infection
5. Diet	• Protein
	Carbohydrate
	• P
	• K
	• Na
	• Water
6. Drugs	anti-hypertensive drugs
	• P binder
	• Vitamin D
	• Iron agents

	• Laxatives
	Erythropoietin and other ESAs
	• Insulin (in case of diabetes)
	• Heparin
	• Antibiotics
	1) Infusion/drain problems
	2) Contamination during exchange
	3) Turbid effluent
	4) Fibrin in effluent
	5) Bloody effluent
7. Trouble shooting	6) Dark yellow effluent
7. Trouble shooting	7) Catheter leakage
	8) Leakage from PD fluid bag
	9) Peri-catheter leak
	10) Abdominal pain
	11) Shoulder pain
	12) Exit pain
8. PD and life	• Daily life
	• Sexual life
	• Exercise
	• Travel
9. PD fluid management	• PD fluid prescription
	• PD fluid delivery

## Supplementary Table 2. Checklist for PD training (for the first home visit)

Title	Content	Reference
Understanding of PD	-Kidney function and ESRD -PD vs. HD -Principles of PD -Exchange method with demonstration (aseptic technique, PD environment) -Record the PD diary -Fluid balance -Diet & Exercise - Problem solving - Exit care and shower -T-set exchange period - Medication	PD education manual
PD price	-PD solution price -payment method	
Delivery	-Domestic delivery -No refund, exchange and delivery without prescription -collection of waste bag	
Benefit	-Handicapped -Support from government/National pension	
Before going home	-prepare the supply -delivery the solution -patient test	

Patient name:		
Date:		
If retraining is the result of a peritonitis episode, wh	nat do you think was the can	use?:
Hand Washing	Yes	No
Hand washing technique is adequate		
Soap is adequate		
Washing time is adequate		
Good technique for drying hands		
No decantation of liquid soap		
Exchange Technique	Yes	No
The patient does an exchange:		
In a suitable room		
Around animals		
Checks date, volume, leak in the bag		
Disinfects the work surface correctly		
Mask		
Does the connection the right way		
"Flush before Fill" is done according to the		
technique		
The date of the MiniCap is observed		
Does the disconnection the right way		
Reconnects to the MiniCap the right way		
Cycler technique	Yes	No
The patient:		
In a suitable room		
Around animals		
Checks date, volume, leak in the bag		
Is very familiar with his or her programming		
Is able to change the programming		
Mask		
Connects the bags and tubing correctly		
Does the priming the right way		
Does the connection the right way		
Does the disconnection the right way		
Reconnects to the MiniCap the right way		
I know what I have to do if:	Yes	No
I see that my fluid is cloudy		
I am constipated		
I am bloated		
I am dehydrated or tired		
I contaminate my transfer line		
I have fibrin in my drain fluid		
I must do every day	Yes	No
Weigh myself		
Take my blood pressure		
Take note of my general condition (swelling, etc.)		
Observe my drain fluid		
Comments:		



## **CONSORT 2010 Flow Diagram**

