

**Adherence with 2016 ISPD Training Guidelines among Pediatric Dialysis Patients in the SCOPE Collaborative**

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For the SCOPE Participating Centers

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**Background**

Patient and care-giver training has often been considered a critical factor for minimizing infection risk in chronic peritoneal dialysis (PD) patients  
However the components required for optimal training remain elusive

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**Background**

SCOPE Collaborative aims to reduce peritonitis rates in pediatric chronic PD patients by increasing implementation of standardized care practice bundles, including training practices.

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### SCOPE Training Bundle

Focus of patient/caregiver training is on prevention of infection with all aspects of procedure.

- Appropriate teaching aids
- Training includes specific protocols for:
  - hand hygiene(WHO)
  - exit site care
  - aseptic connection technique
- Post Training concept test and Demo every 6 months.
- Home visit by RN

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### Background

ISPD released guidelines based on adult learning principles for teaching PD to patients and caregivers in 2016. These recommendations included practices not previously included in the SCOPE training bundle.

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### ISPD Training Guidelines

**Day by day descriptions of topics with suggested teaching methods based on Adult Learning Principles.**

- **Assessment of learning style (VARK or Kolb)**
- **Schedule- suggest 5 consecutive days**
- **Training ~10 days after catheter placement**
- **Breaks every 2 hours - sessions ~3 hours/day**
- **Home visit for first home treatment**
- **Skill must be demonstrated at least 3 times without error.**

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Peritoneal Dialysis International

SYLLABUS FOR TEACHING PD

**APPENDIX A**

PERITONEAL DIALYSIS (PD) TRAINING COURSE SYLLABUS

This course is based on Knowles's (11) 6 principles for adult education: 1) adults are internally motivated and self-directed; 2) adults bring life experiences and knowledge to learning experiences; 3) adults are goal-oriented; 4) adults are relevancy-oriented; 5) adults are practical; and 6) adult learners like to be respected.

**DAY 1**

**Objectives:** To establish a rapport, describe the goals and plan of the course, demonstrate the steps of different procedures, assess patient learning styles and barriers, explain how learning will occur, introduce concepts of PD.

Topic	Adult Learning Principle (ALP)	Teaching Tips
Establish rapport/develop relationship with patient/caregiver	ALP 6	Be a good listener.
	Need to believe oneself to be capable of learning.	Show interest in the learner as a person. With an open discussion, ask patient about his/her understanding of renal disease and therapy.
Assess learning style	ALP 2	Set expectations: objectives, process and evaluation.
		Utilize VARK questionnaire to assess learning style. Table 1 has examples of tailoring teaching toward each learning style: Visual – utilize visual material Aural (auditory) – ask patient to repeat explanations Read/write – ask patient to write a list and points of importance Kinesthetic (motor) – show videos, to demonstrate how things work/use apron/mannequin to simulate

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### COMMON TRAINING ELEMENTS

- **Training is performed by qualified RN.**
- **Each family unit is trained 1:1 with RN**
- **Training protocols based on ISPD guidelines.**
- **Health literacy assessment (REALM)**
- **Track the number of hours training**
- **Post training test**

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**Objective**

To describe compliance with ISPD training guidelines among patients enrolled in SCOPE.

To assess association between ISPD training compliance and peritonitis within 6 months of catheter insertion.

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**Design**

Twenty-nine centers reporting training bundle compliance for new catheter insertions between October 2011 and September 2015 were included.

Compliance with care bundles and peritonitis rates were collected monthly.

In addition, care practices not included in the bundles were captured.

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**Methods**

Center-specific descriptive statistics on training sessions

- Categorical data summarized as N (%)
- Continuous data summarized as median (IQR)

Adherence to ISPD guidelines was summarized as N (%)

Association between all-or-none compliance with ISPD guidelines and peritonitis infection within the first 6 months post-catheter insertion was assessed using a chi-square test for association.

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### Results

During the first 48 months of the collaborative, information on training sessions for 473 new PD catheter insertions were submitted.

- The median (IQR) number of hours spent training: 23.4 (14, 35.1)
- The median (IQR) number of training sessions: 8 (5,10)
- The median (IQR) number of hours per session: 3 (2,4)

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### Compliance with Key Components of ISPD Guidelines

ISPD Recommendation	SCOPE Compliance, N(%)
>= 10 Days between Insertion/Training	293 (62%)
Home Visit	375 (80%)
1:1 Trainer-to-family Ratio	446 (95%)
<=3 Hours Per Session	239 (51%)
All or None	104 (22%)

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### Peritonitis Rates

Peritonitis occurred in 73 of the 473 new catheter insertions within the first 6 months

- Of the 73 with Peritonitis, 21 (29%) were compliant with all key components of ISPD guidelines.
- Of the 400 with no Peritonitis, 83 (21%) were compliant all key components of ISPD guidelines.

No association between compliance with ISPD recommendations and peritonitis infection within the first 6 months after catheter insertion (p=0.128)

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### Conclusions

Retrospective evaluation of compliance with the new ISPD recommendations in the SCOPE collaborative demonstrated relatively poor all-or-none compliance.

Further investigation into the barriers of implementing key training components and the impact on subsequent infection is warranted.

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### SCOPE Partners



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### SCOPE Team Members



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