

## BACKGROUND AND IMPORTANCE

Staff knowledge about Sterile Medical Device (SMD) is weakened by staff turnover, acute understaffing, constant changes in the SMD field and numerous marketing shortages and discontinuations. However, the daily use of SMD is a source of misuse if important concepts are unknown. Comments and questions from hospital staff reveal a need for training sessions.

## AIM AND OBJECTIVES

The main objective of this work is to remind hospital staff of important SMD's concepts to improve the quality and safety of SMD used.

## MATERIALS AND MÉTHODES

### 1 Development of a knowledge survey

We defined **50 technical or practical concepts** thanks to our interventions history about SMD. They have been transposed into 50 questions classified into 5 themes : **general information, bandages, digestive approach, parenteral approach, and miscellaneous.**

Their knowledge was assessed **among nurses, managers, residents, physicians, midwives, pharmacy technicians and pharmacists** with a web based survey (GFORM).

### 2 Development of a response analysis score

A rate of knowledge (RK in %) was calculated for :

each concept :  
 $RK_c^*$

each theme :  
 $RK_t$

globaly :  $RK_g$

\*percentage of people who think they know the concept

The concept or theme is considered known if the  $RK > 70\%$  or unknown if the  $RK < 40\%$ .

The unknown themes will be the subject of a series of training videos produced with Adobe Premiere Pro.

### 3 Video design and satisfaction evaluation

Video design in 3 steps :

- 10 days to write a script
- 1 day to shoot the sequences of a video
- 7 days to edit the video using Adobe Premiere Pro

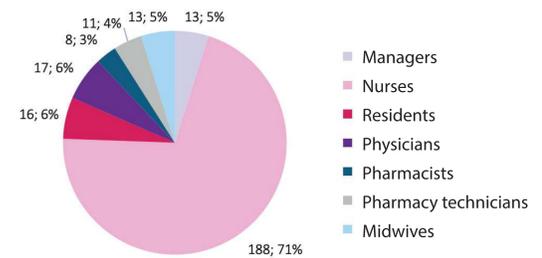
The **format and content** of the first video was evaluated through an web-based survey sent by email with the first episode. We wanted to know what concepts were learnt in order to evaluate the benefit of this first training video.

## RESULTS

### Analysis of the number of returned surveys

Number of returned surveys: **266**

Distribution of respondents by professional category



### Analysis of the surveys responses

The 50 concepts are moderately known ( $TC_g=47\%$ ).

**11 known concepts**

The **gauge** varies **inversely with catheter diameter** ( $RK_c = 76\%$ ),  
The difference between peritoneal dialysis and hemodialysis ( $RK_c = 74\%$ ),  
The short catheter allows peripheral venous access ( $RK_c = 73\%$ ).

**20 moderately known concept**

The difference between a bi directionnal and a non-return valve ( $RK_c=59\%$ ),  
The difference between a one piece and two piece ostomy ( $RK_c=52\%$ ),  
The knowledge of the two main properties of alginates ( $RK_c = 50\%$ ).

**19 unknown concepts**

The meaning of the **logo**  ( $RK_c = 29\%$ )  
The indication of **sterilization method** ( $RK_c = 17\%$ )  
What is ENFit connectivity ( $RK_c = 13\%$ )

Two topics are unknown: generalities ( $RK_t = 37\%$ ) and the digestive approach ( $RK_t=36\%$ ).

### Production of the videos and results of the evaluation

The «Capsule Pharma» is a série of 4 minutes videos explaining a theme of the survey. Each episode alternates photos and videos in rhythm with the music to make it captivating.

The first episode treats of generalities. It received a satisfaction of 9,5/10. All the people (n= 29) who answered, learned new concepts such as the different types of connectors (n=19) or the mention indicating the sterilization mode (n=17). The remarks of the questionnaire allowed us to improve our second video on the digestive approach.



## CONCLUSION AND RELEVANCE

This study shows how important continuous training is the key for hospital staff to better understand SMD. This work illustrates the benefit of our training since the main concepts learnt correspond to the poorly understood concepts identified in the knowledge questionnaire. The microvideo was chosen for its quick and unlimited playback on different media and appreciated for its attractiveness and clarity. Capturing the audience quickly, conveying the essential information in 4 minutes and ensuring that the writing does not scroll too quickly are the real challenges of these videos.

«Capsule Pharma» will become an innovative and institutional communication tool for SMD and other health products.

