



IMPACT OF THE IMPLEMENTATION OF THE ENFIT SYSTEM™ ON THE ADMINISTRATION OF ENTERAL MEDICATION



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OBJECTIVES

The ENFit system™ is specific to enteral nutrition and has been designed in such a way that the connection with non enteral systems
 ⇒ **The aim of study:** determine the impact of the change of this connection on enteral drug administration

METHODS

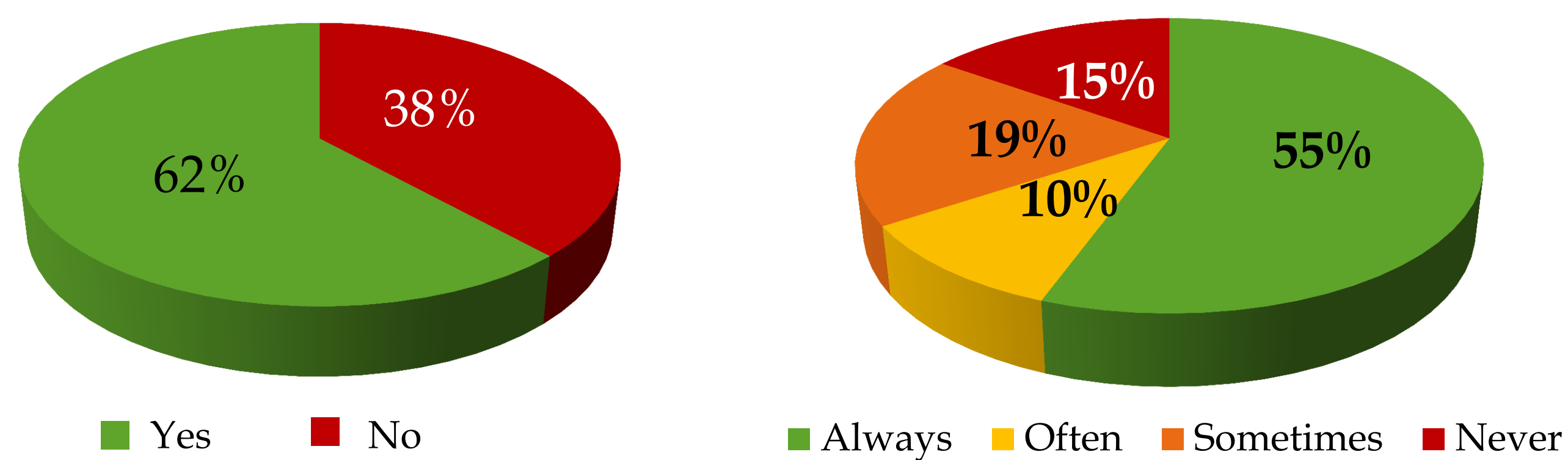
- ❖ Nurses' professional practice evaluations (EPP) on enteral nutrition by questionnaire:
 - ⇒ Three themes addressed: flushing of administration routes, grinding of tablets/opening of capsules, used syringes
- ❖ In-vitro study: administration of micro-granules (morphine placebo sulphate sustained release (SR)): comparison old and new connectivity

RESULTS

EPP n = 95 nurses

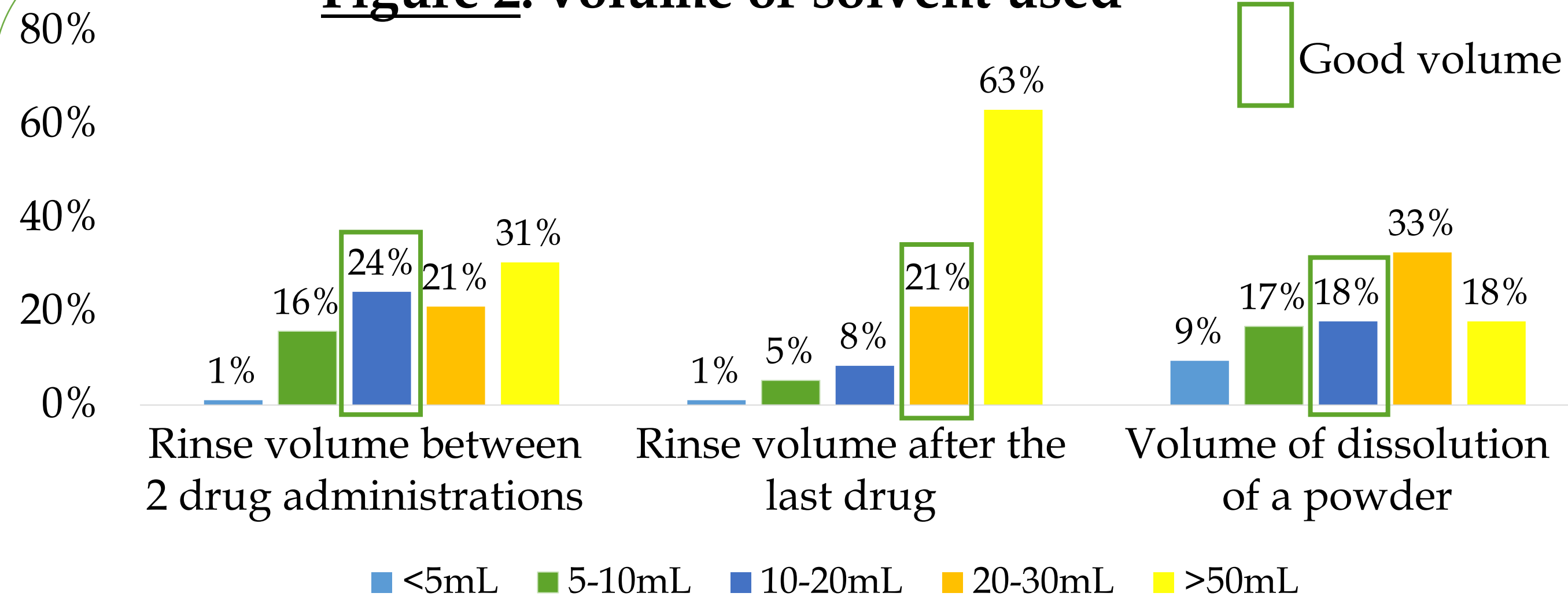
Figure 1: rinsing the nutrition probe

Before and after drug administration Between each drug administration



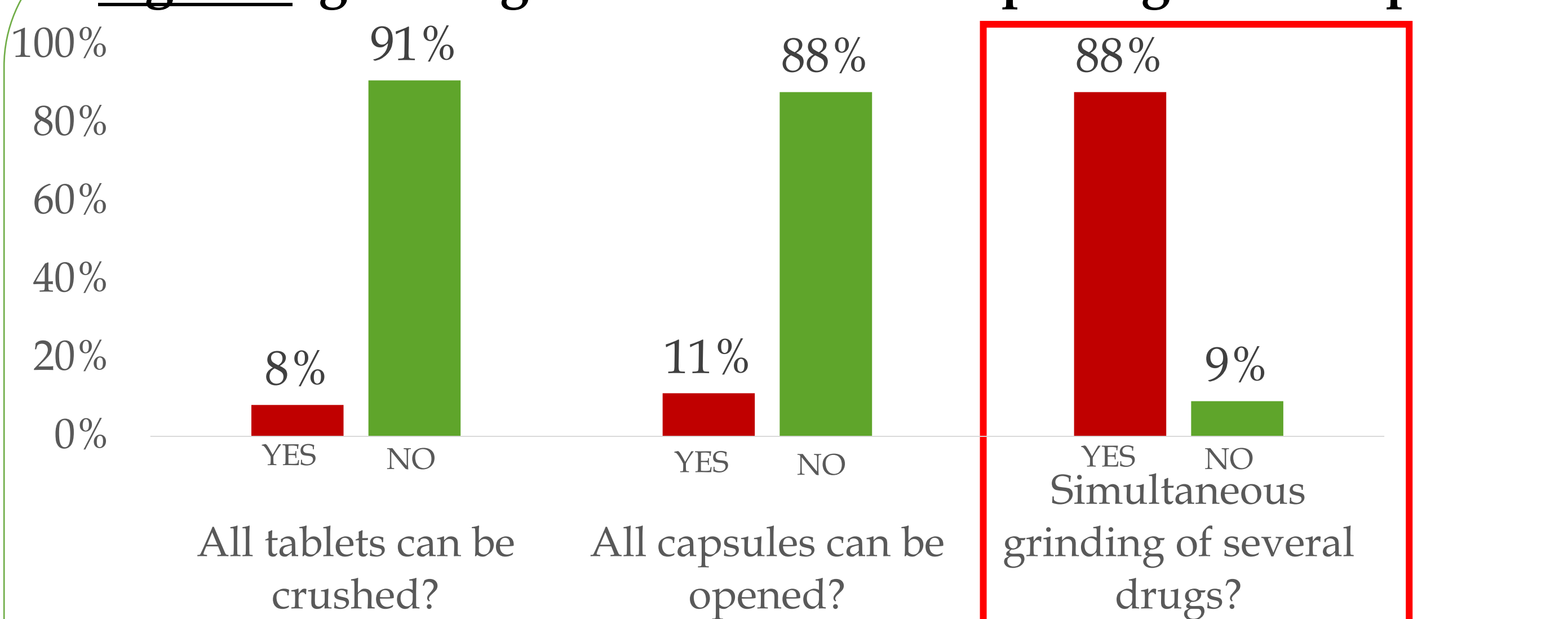
⇒ Many cases of **incorrect rinsing**

Figure 2: volume of solvent used



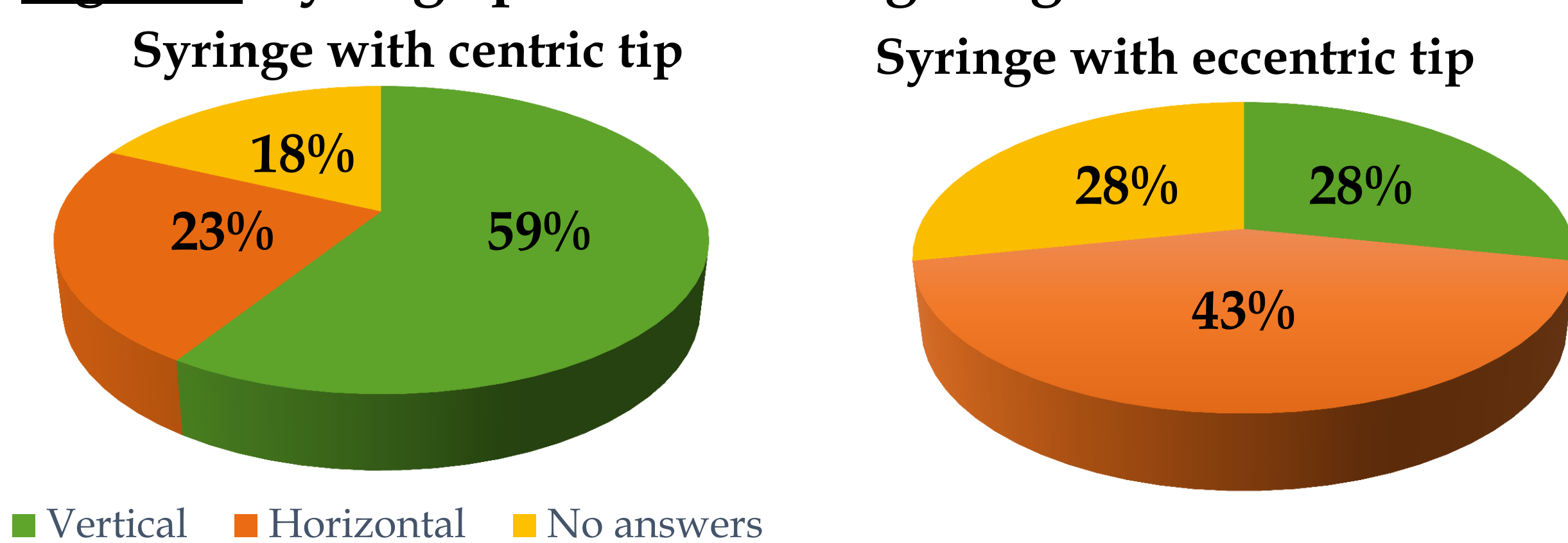
⇒ **Low knowledge** of solvent volumes: ~ **20%/volume**

Figure 3: grinding of the tablets and opening of the capsules



⇒ Mostly satisfactory knowledge BUT ~ **90% IDE: simultaneous grinding of several drugs**

Figure 4: syringe position during drug administration



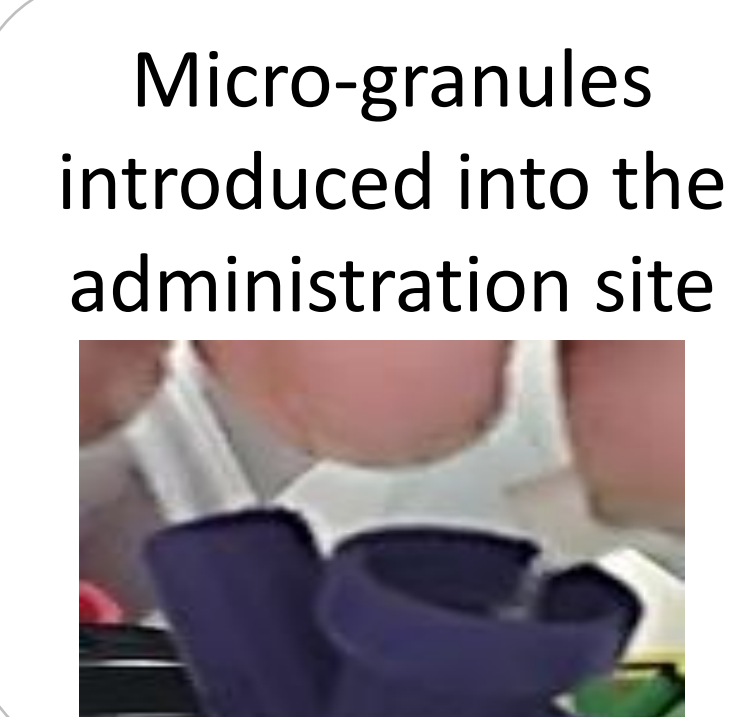
⇒ **Vertical** position: centered syringe = **59%**, eccentric syringe = **28%**

Facilitates passage of particles

IN-VITRO STUDY

Figure 5: method of administration placebo granules of morphine sulphate SR

Administration with the old connectivity

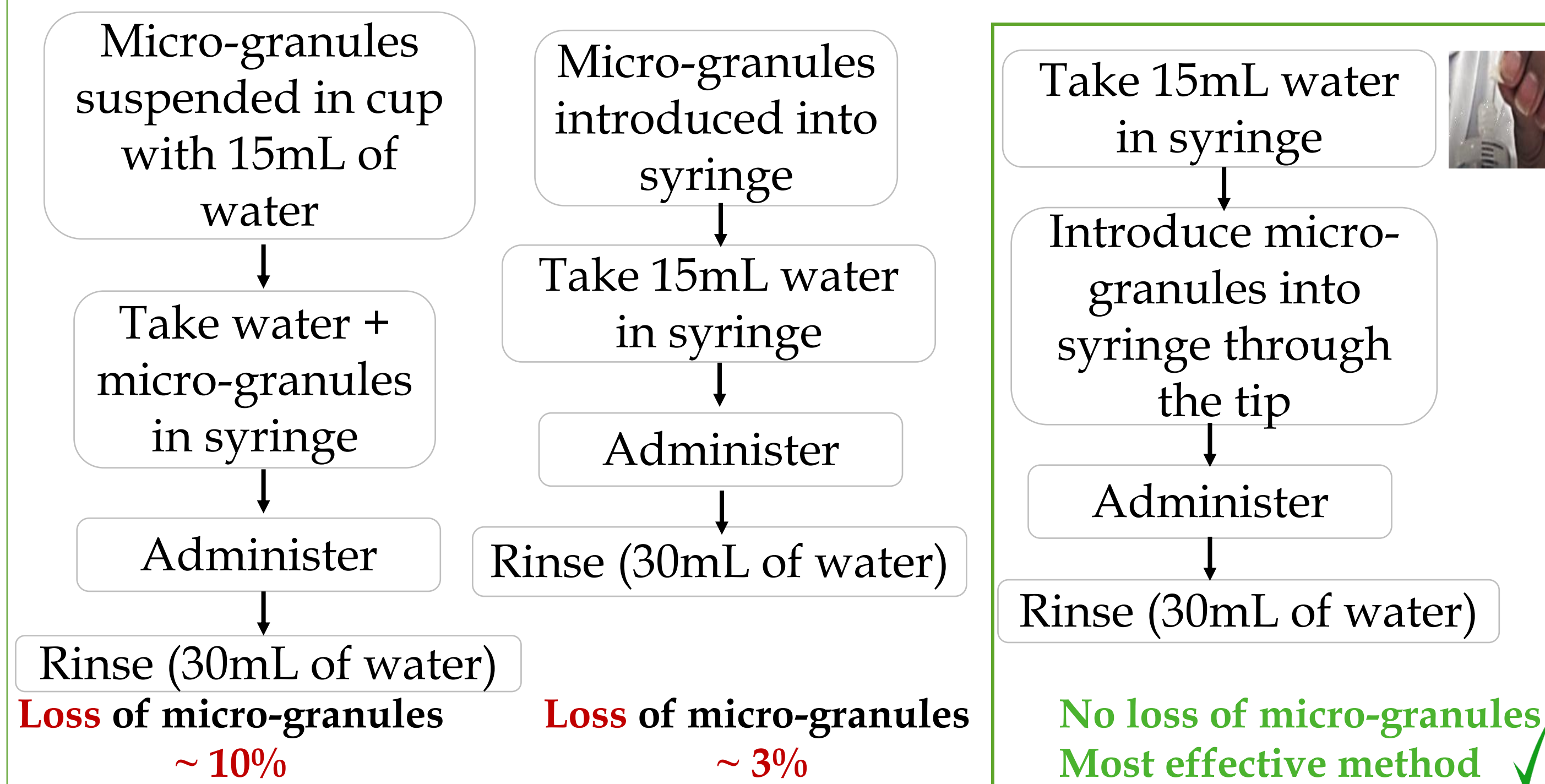


Administer 15mL water
Rinse (30mL of water)

BUT with ENFit system™ the administration site is narrower: direct introduction of micro-granules **impossible**

New method of administration needed

Comparison 3 methods of administration: 500mg of micro-granules (morphine sulphate SR 200mg)



⇒ **Most suitable method: introduction micro-granules in syringe pre-filled with water**

Protocol: administration enteral nutrition then 4 drugs (atorvastatin 40mg, lysine acetyl salicylate 75mg, bisoprolol 5mg, placebo morphine sulphate SR)

SETTINGS	RESULTS
Syringe position	Vertical > Horizontal
Rinse between 2 drugs (10-15mL of water)	Rinsing if not obstruction of the probe to the administration of morphine sulphate SR
Rinsing mode	Pompe > Manuel
Rinsing method	Pulsed > Continued

Table 1: impact of some parameters on granule administration

⇒ **Optimal conditions administration:** vertical syringe + rinsing between 2 drugs via pump

DISCUSSION/CONCLUSION

- ❖ Heterogeneous practices and lack of knowledge of nurses about enteral drug administration
 - ⇒ risk of medication errors or misuse (ex: early obstruction of the nutrition tube)
- ❖ ENFit system™: security of enteral nutrition BUT constraints to administer drugs:
 - ❖ Establishment of **enteral drug administration protocols**
 - ❖ **Re-awareness of nurses** to good administrative practices

ACKNOWLEDGEMENTS

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