



A CROSS-UNIT IMPROVEMENT OF NURSING INSTRUCTION INTEGRITY OF ABDOMINAL DRAINAGE TUBE BY USING MULTIDIMENSIONAL TEACHING STRATEGY

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INTRODUCTION

Approximately 90% of patients after abdominal surgery will have a drainage tube placed, and **about 20% of these patients will need to take the drainage tube home** for further care. If nurses possess the correct knowledge and skills for wound drainage tube care, and **extend that knowledge and ability to home self-care**, not only can patients' anxiety be reduced, but also the risk of complications such as infection and dislodgement can be avoided. **Multidimensional teaching strategy to establish three stages** to improve the integrity of care for post-operation drainage tube placement after surgery to avoid affecting patient safety.

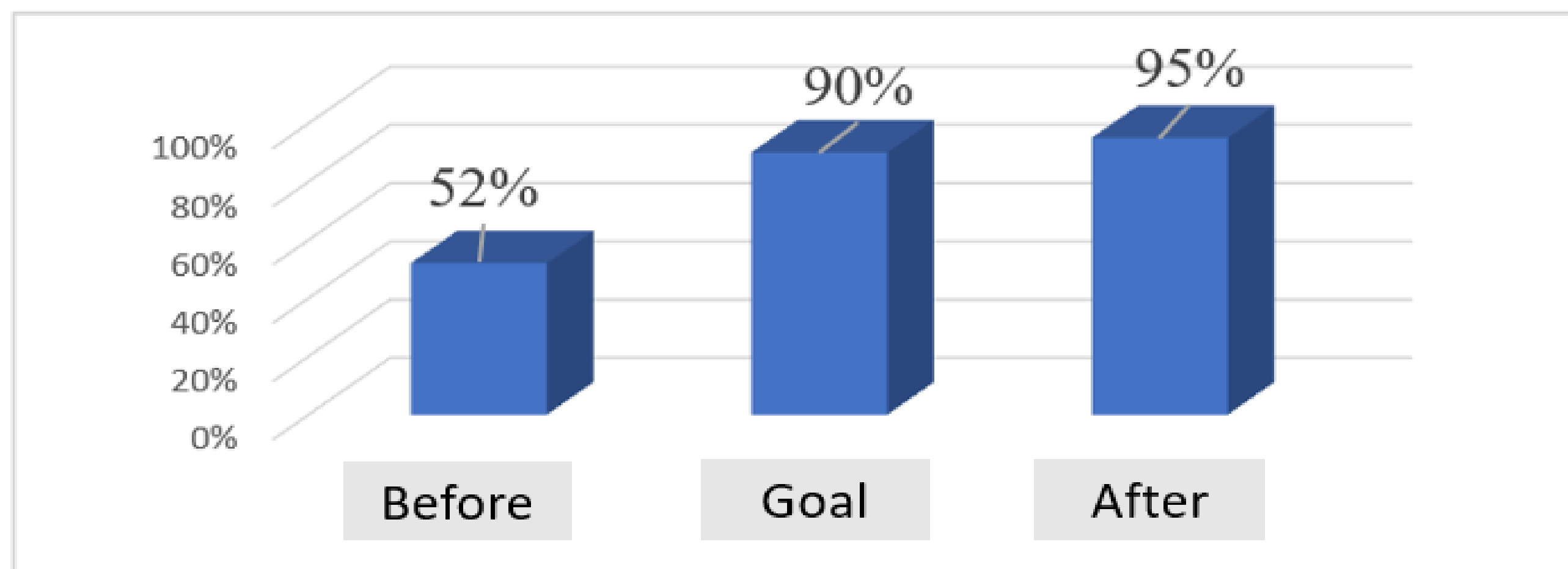
AIM

Multimodal teaching strategies can improve **nurses' critical thinking, problem-solving abilities, and enhance their learning efficiency**. Patient education is an important role of the nurse, by applying the learned knowledge and skills in the clinical care, it will **maintain patient safety and improve the quality of nursing care**.

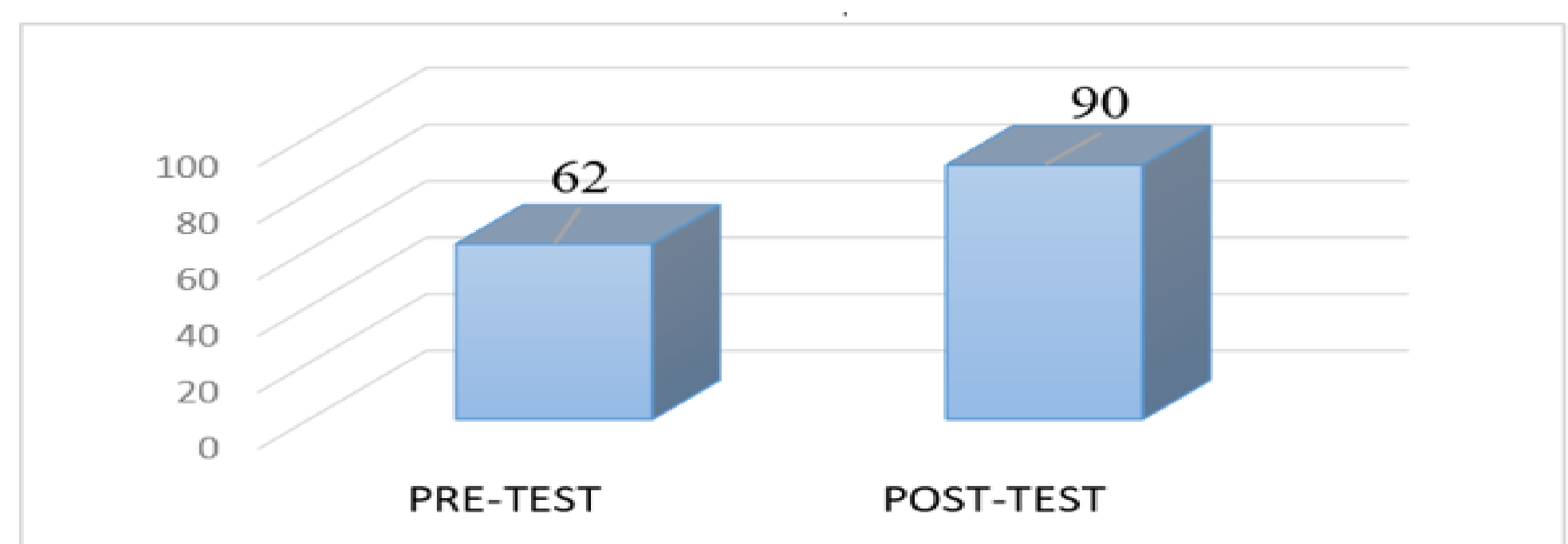
RESULTS

After implementation, the completeness of drainage tube care provided by nurse **improved from 52% to 95%** (Figure 4) and their understanding of drainage tube care increased from **62 score in the pre-test to 90 score in the post-test** (Figure 5).

(Figure 4)



(Figure 5)



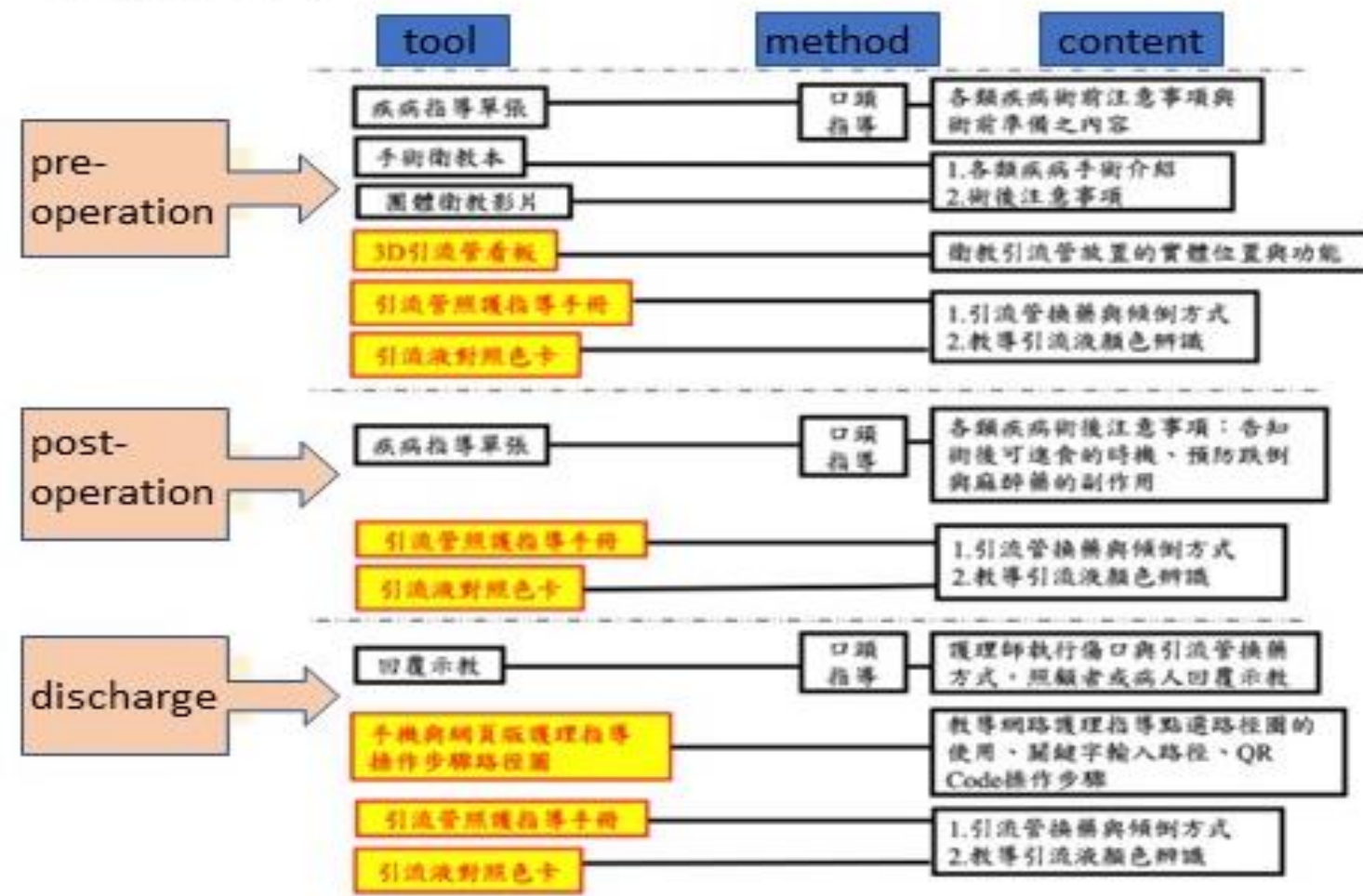
Demonstration teaching of wound drainage tube care

METHOD

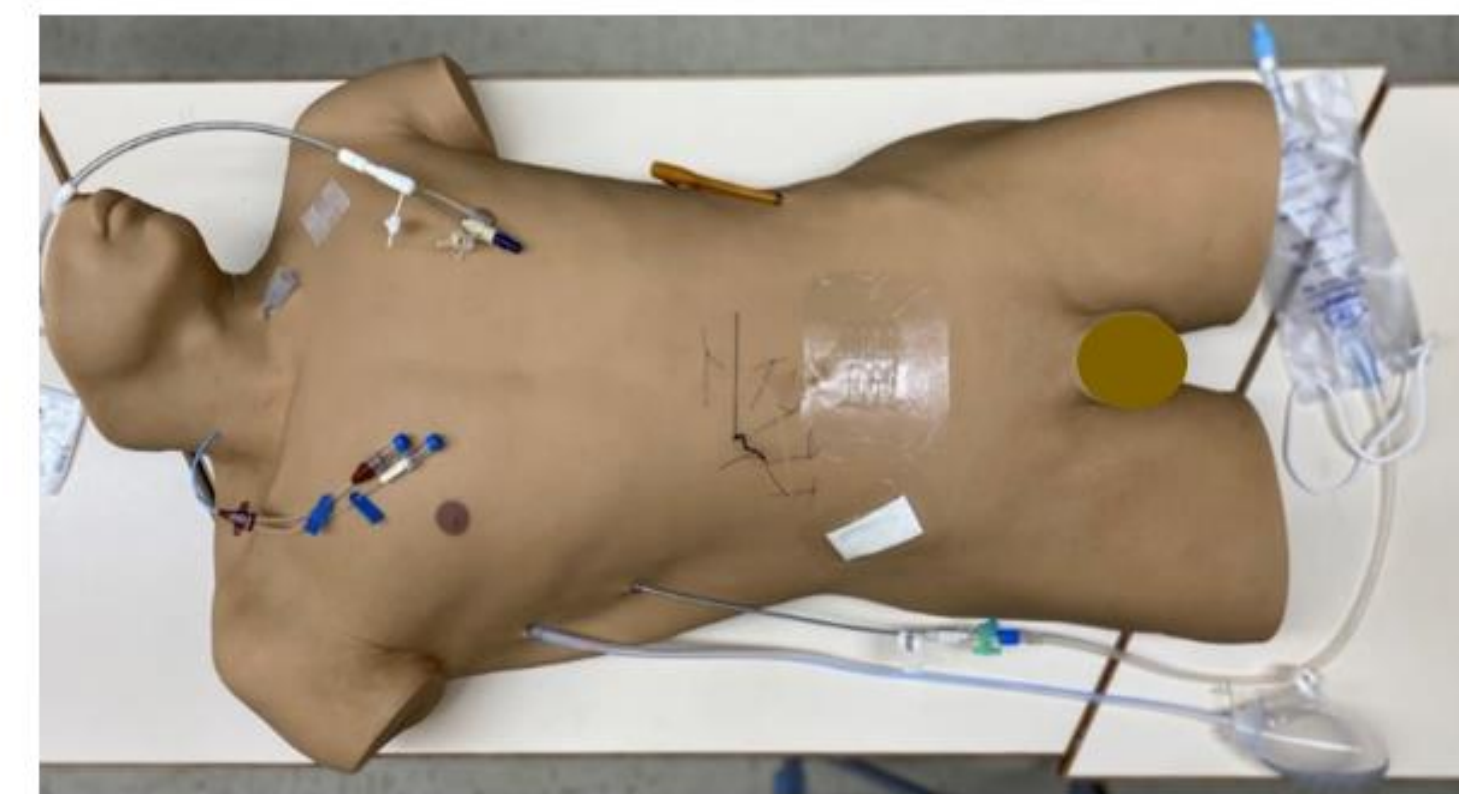
During the period of April to October 2021, based on the standard operating procedures for wound drainage tube care, a **"Nurse Implementation of Patient Wound Drainage Tube Care Education"** checklist was designed to investigate the completeness of patient education for wound drainage tube care provided by nurse in four surgical units. The study observed 48 nurses, and the results found that the completeness rate of patient education was only 52%.

Integrating the **three stages of pre-operation, post-operation, and discharge day** across four surgical units, the content and tools needed for wound drainage tube care at each stage were formulated into a **care map** for nurse (Figure 1). The nurse were trained using **objective structured clinical examination, mini-clinical evaluation exercise, direct observation of procedural skills (DOPS)**, etc. and a **standard module for abdominal drainage tube care** was created (Figure 2). The patient education content was made into **QR codes for patients to use at home** (Figure 3), allowing for precise control of each step of the execution and ensuring the completeness of the three stages.

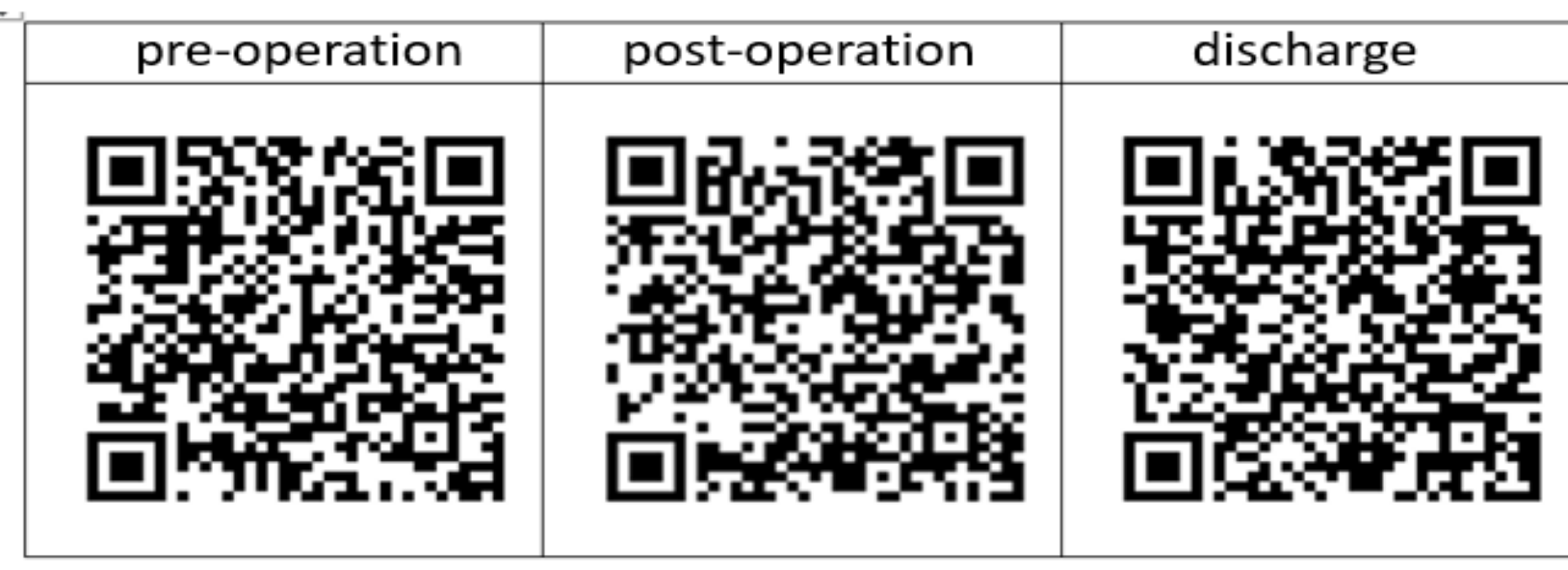
(Figure 1)



(Figure 2)



(Figure 3)



CONCLUSIONS

Using various teaching strategies to enhance nurses' understanding of the drainage tube care integrity not only **increases nurses' knowledge and skills**, but also **improves their ability to guide patients or families**. It also reinforces nurses' emphasis on **patient safety** with drainage tubes, and **implements "patient-centered" care**.

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