

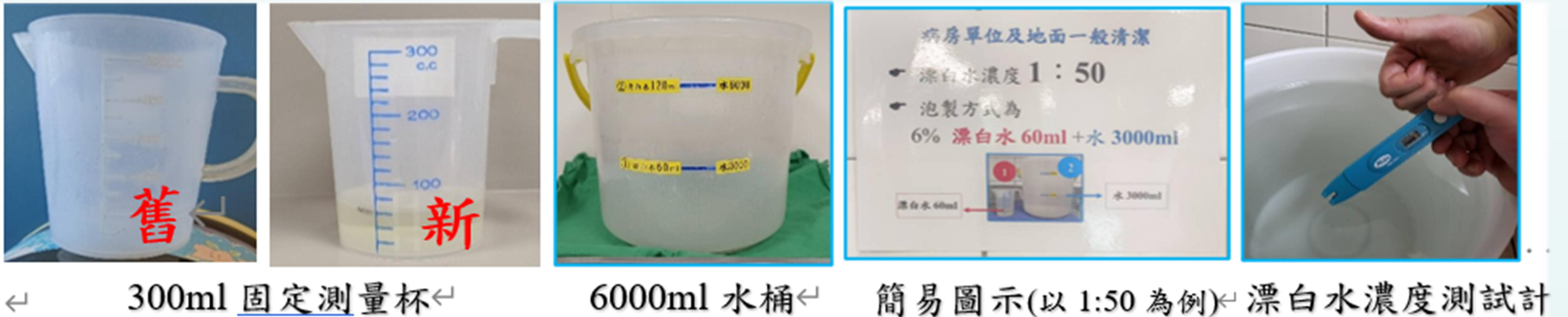
Using multiple strategies to improve the accuracy of cleaning staff in preparing bleach

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Background and objective

The management of environmental cleaning and disinfection in healthcare facilities is one of the crucial measures for preventing healthcare-associated infections. The cleanliness of the environment should be appropriately monitored to provide a safe and hygienic setting, protecting the health of staff, patients and visitors. During the 2024 infection control hospital ward environmental quality inspection, it was found that cleaning staff were unclear about the bleach concentration and sometimes used it incorrectly during the final cleaning and disinfection of discharged beds. Specific goal 1. The accuracy rate of cleaners' knowledge of bleach concentration reaches 80%. 2. The accuracy rate of cleaners in preparing bleach solutions reaches 80%. 3. Develop appropriate learning tools for cleaners to prepare bleach solutions.

Methods / Intervention



1. Purchase 5 clearly marked measuring cups and bleach test kits.
2. Create a "Simple Bleach Preparation Flashcard" in font size 72 as a learning tool.
3. Conduct one-on-one guidance on bleach concentration, demonstrate and correct the proper preparation method twice a week for four weeks, guiding a total of 48 participants.
4. Ask the administrative team to produce waterproof labels indicating the bleach and water amounts directly on the containers.
5. Post the simple bleach preparation flashcards in the preparation area and conduct one-on-one teaching using these cards.
6. Collaborate with the administrative team to organise in-service training for cleaning staff, using the flashcards to teach bleach concentration and correct preparation methods, followed by a questionnaire test. Out of 18 questionnaires collected, 15 were correct, with an accuracy rate of 83.33%.
7. Daily, cleaning staff check the concentration of the bleach prepared using the bleach test kit to ensure it is correct.

Results

1. The questionnaire conducted a post-test on knowledge of bleach concentration (general environmental cleaning and blood/body fluid concentration), with 12 people answering correctly, a correctness rate of 86%, and a target achievement rate of 108%.
2. Daily monitoring of cleaning staff preparing bleach solutions to ensure maintained effectiveness, with a total of 25 instances, 20 correct, a correctness rate of 80%.
3. Cleaning staff's satisfaction with the improved tools was 100%.

Conclusion and Discussion

Guiding cleaning staff is not an easy task. Although objective tools were used in this case to test and quantify the problems, the process still required multiple repeated demonstrations or other measures to allow the cleaning staff to know how to correctly prepare bleach. The experience also revealed that, although the trained cleaning staff could correctly answer the questions about bleach concentration, some still took chances, thinking they would not be inspected, and did not follow the correct bleach preparation. In the future, monitoring will continue to ensure that the quality of environmental cleaning and disinfection is maintained, jointly safeguarding a safe and hygienic environment.