

ABSTRACT

Purpose: Hand hygiene (HH) is the undisputed single most effective infection control measure in the prevention of hospital-acquired infections (HAIs). In the United States, approximately 15 million patients experience the ill effects of HAIs every year. This project aimed to increase awareness of HH practices as a means of increasing HH compliance rates using a before and after educational intervention, visual reminders, observation, and staff counseling.

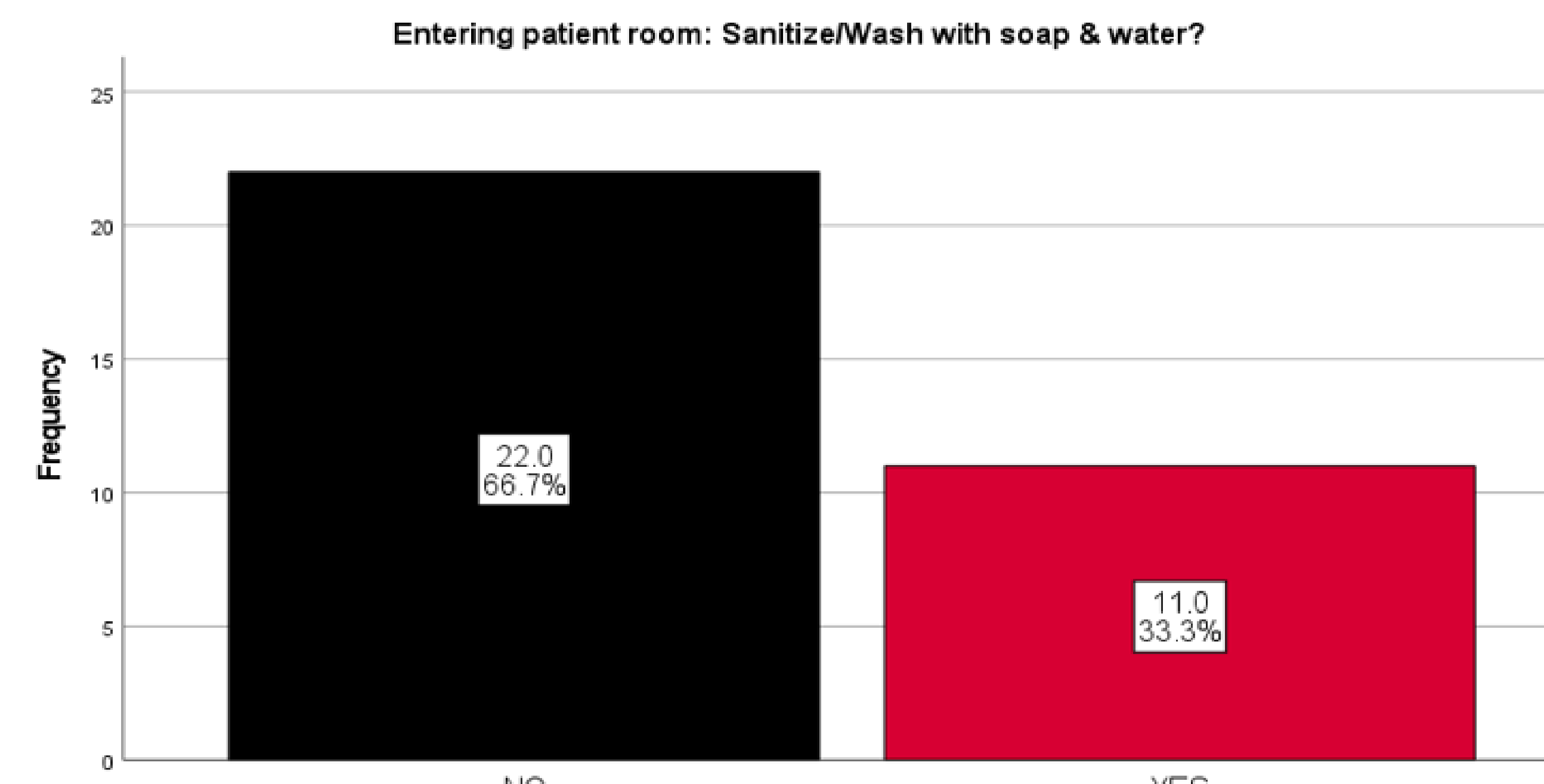
Methods: This interventional project implemented an educational intervention regarding HH practices and assessed knowledge before and after the intervention. Following the session, visual reminders, and poster boards on HH were strategically placed. Compliance records from the project site were used as the pre-intervention data. Compliance after the intervention was measured by direct observation. Differences in knowledge scores and compliance rates were measured before and after the intervention.

Results: A total of 50 persons were recruited for this quality improvement project. More than half (56%) of the participants were Registered Nurses, 24% were Licensed Practical Nurses, and 10% were Physicians. A T-test showed that there were significant differences in the baseline and post-intervention knowledge of HH practices (T-test: Pre-intervention score=3.74 (0.49); post-intervention score=4.00 (0.00); p. value=<0.001). The compliance rate was low pre-intervention. However, after the educational intervention, the compliance rate increased significantly from the baseline of 33.3% to 87.8%.

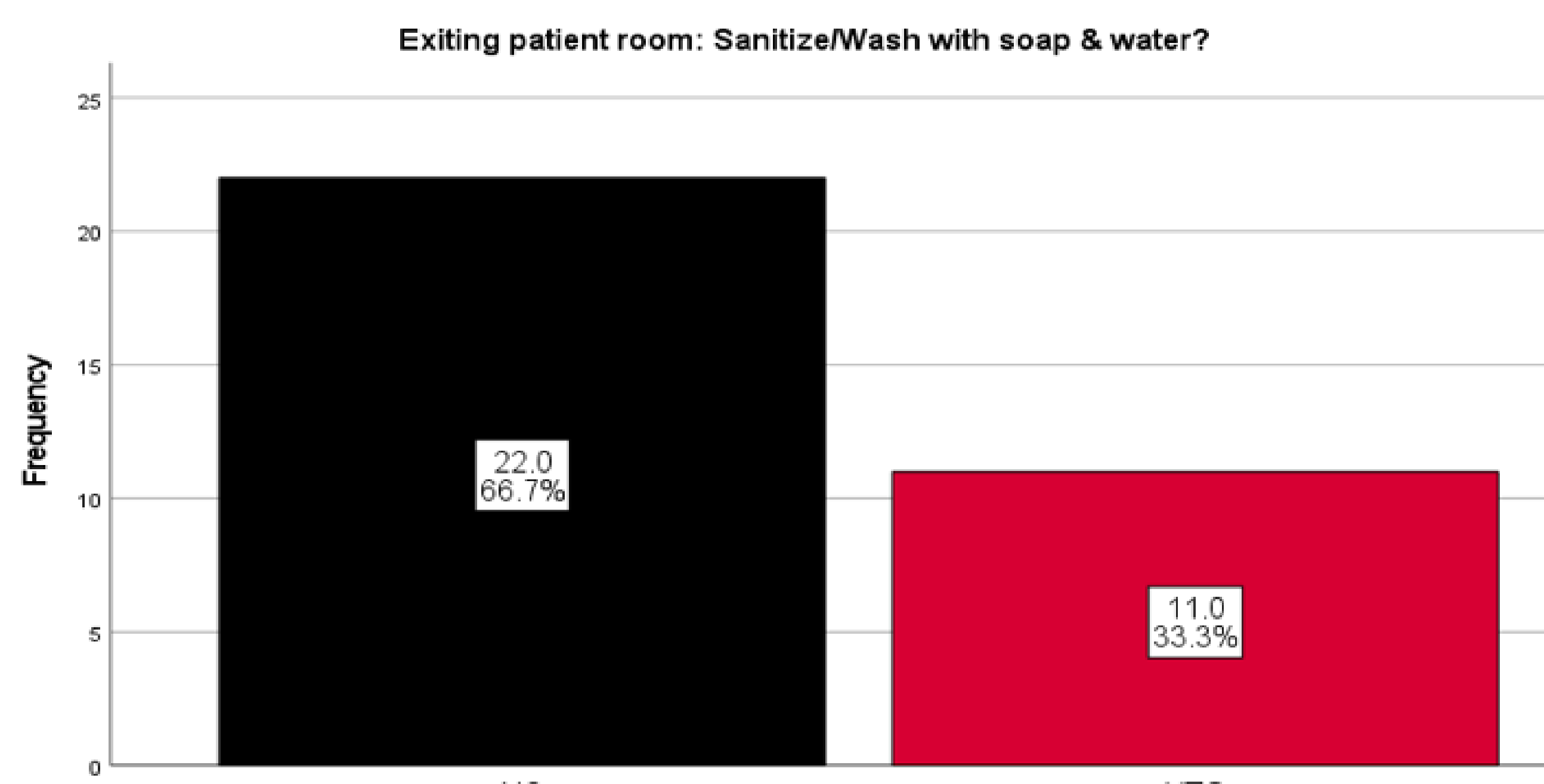
Implications: A contributing factor to transmission of infection in a hospital setting is improper HH, which is ultimately a contributing factor in driving up hospital costs and affecting patients' quality of life. Healthcare institutions should invest in standardized HH training and provide feedback to staff on HH compliance rates. Economic and clinical benefits of education, visual reminders, and direct observation with counseling (which are low-cost interventions) as necessary regarding HH practices include reduced HAIs, drug resistance, hospital stay, and mortality of patients. Further research is needed to determine healthcare providers reluctance to washing their hands and understanding the strategies that work best to sustain high rates of HH compliance.

Keywords: hand hygiene; hand hygiene compliance; healthcare-acquired infections

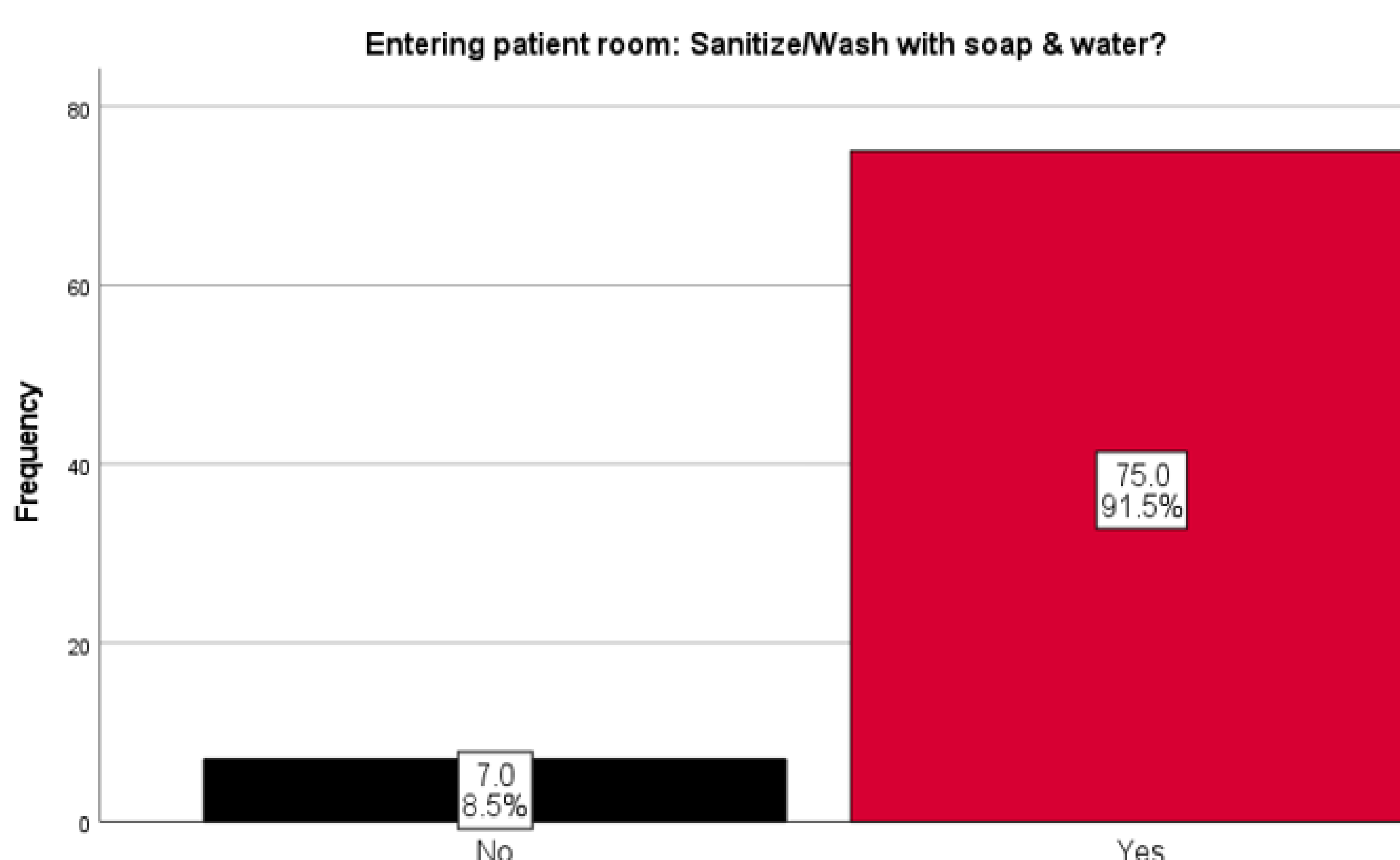
Pre-Intervention Observation Bar chart showing of the proportion of observations that complied with washing hands correctly/sanitizing before entering patient's room.



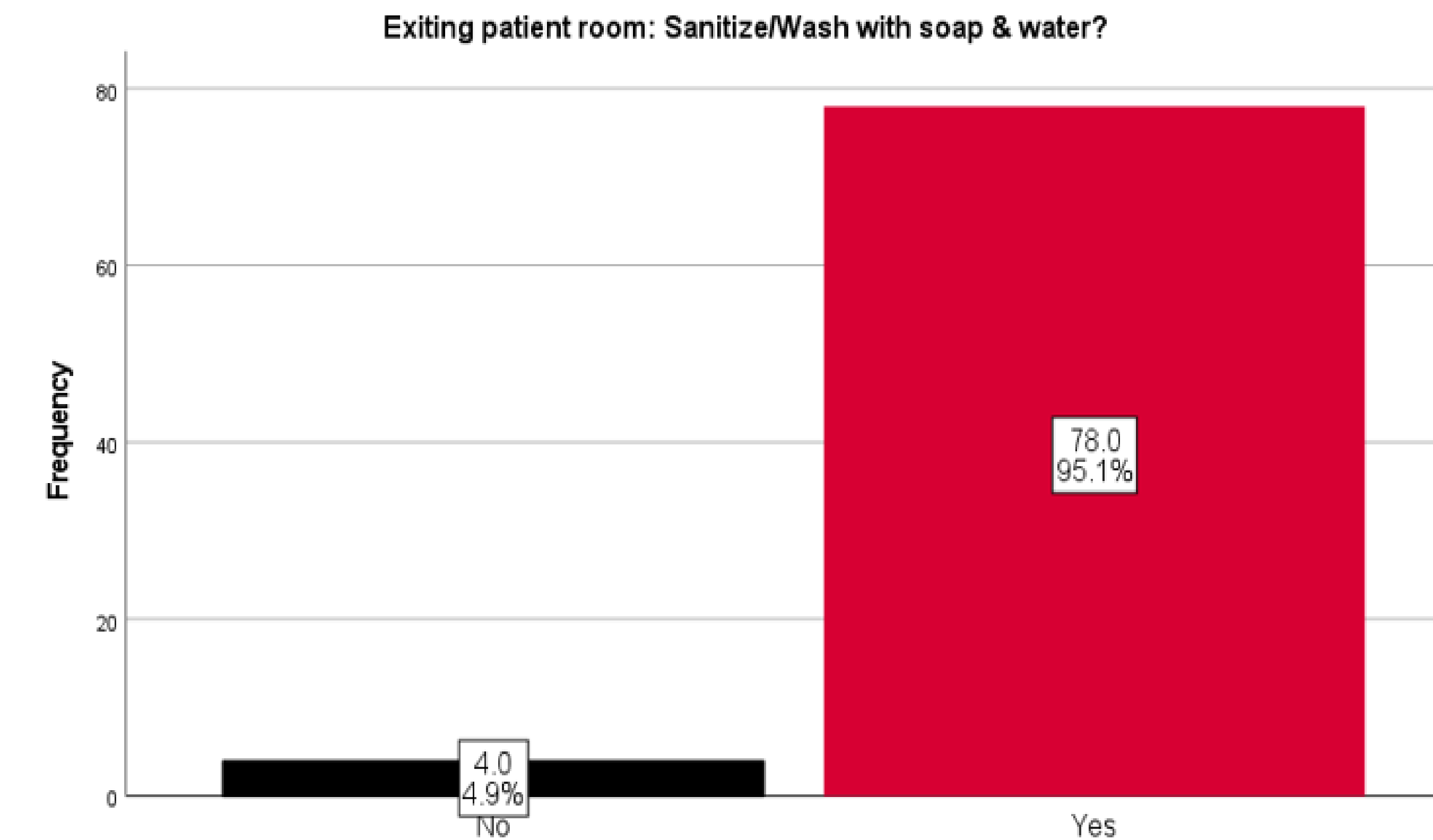
Pre-Intervention Observation: Bar chart showing of the proportion of observations that complied exiting patient's room.



Bar chart showing of the proportion of observations that complied with washing hands correctly/sanitizing before entering patient's room.



Bar chart showing of the proportion of observations that complied with washing hands correctly/sanitizing after exiting patient's room.



Discussion

- The result of this study showed that the baseline hand hygiene knowledge of the staff was above average.
- After the educational intervention, the hand hygiene knowledge score improved.
- The hand hygiene knowledge score post-educational intervention was significantly higher than the baseline.
- Also, there was a low compliance rate before the educational intervention. However, after the educational intervention, the compliance rate increased significantly from the baseline.

Conclusion

The result shows that the intervention can improve the quality of care of patients and improve patients' and staff's safety from communicable diseases.

References

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