



Safety Training for N95 Respirator Reuse: A Virtual Approach



Beth Clarke RN MSc(A) MBA CWOCN
Nanci Haze RN MSN CPNP
Jacqueline Sly RN MSN FNP-C
Allan Thomas MSN CRNA

BACKGROUND

National shortage of N95 respirators compelled reuse

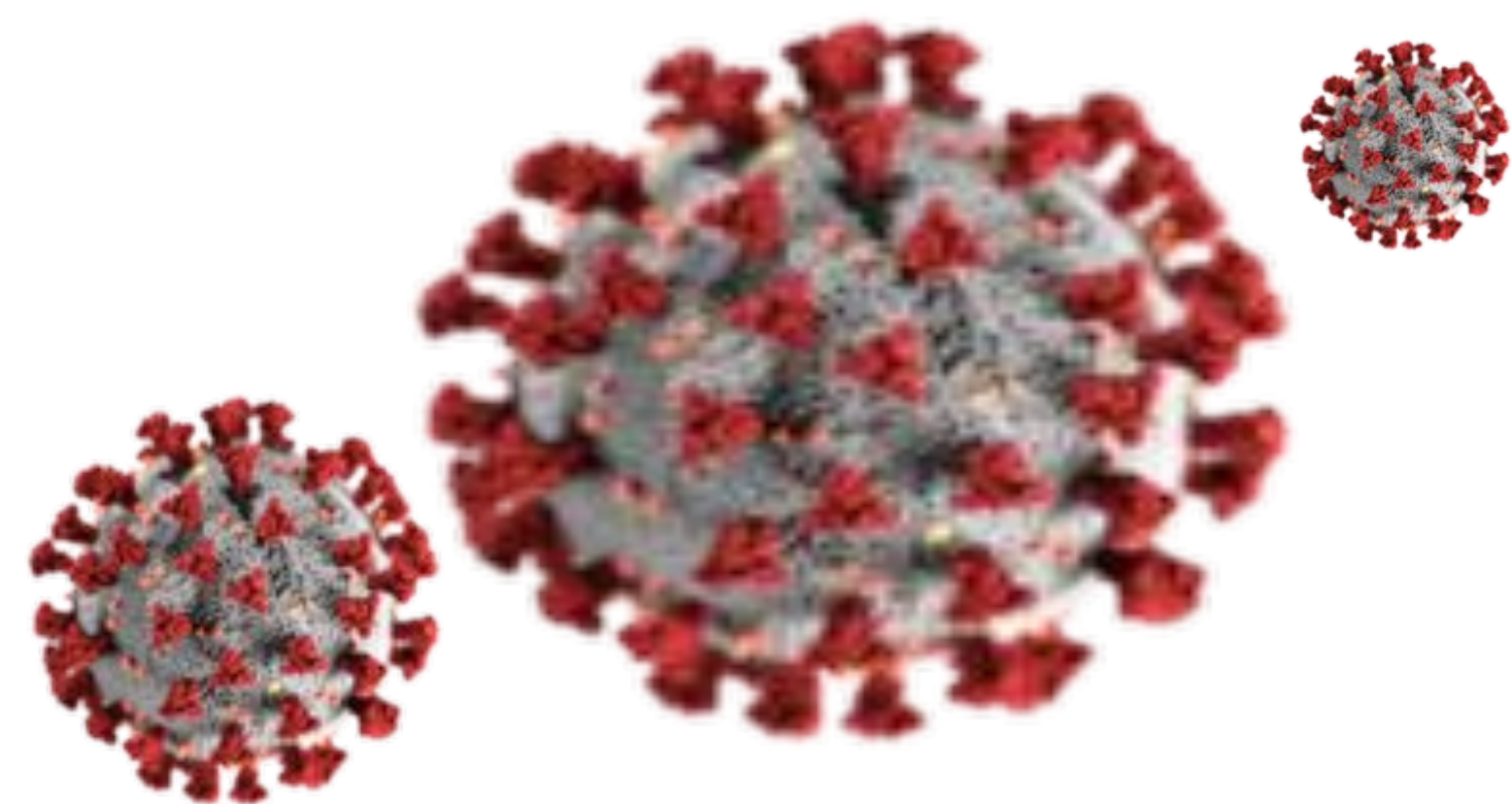
Absence of educational materials to promote safe reuse

Covid 19 contamination risk increases with poor reuse techniques

Nursing students required to learn how to reuse N95's for reentry into clinical practice

Simulation is a well studied pedagogy to teach nursing skills.

Social distancing and site closures created challenges for clinical teaching



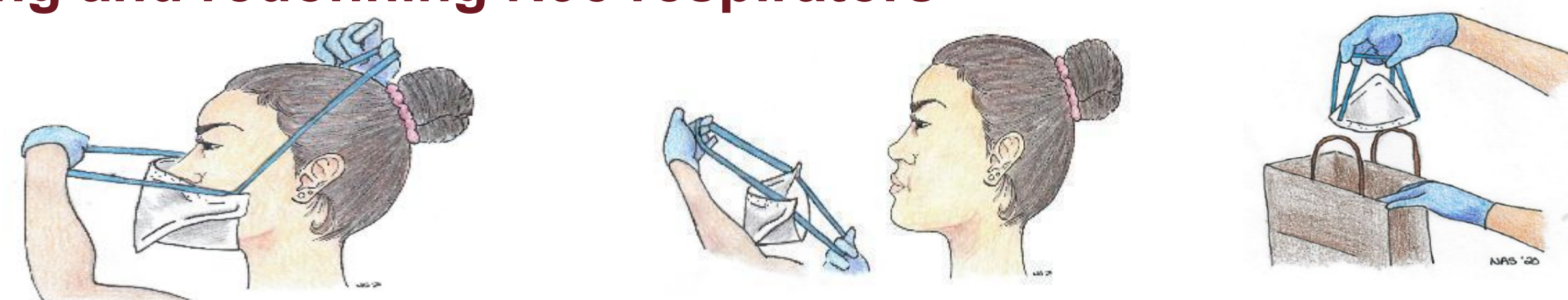
METHODS AND RESULTS

A synchronous live simulation program delivered virtually with video conferencing was developed to teach students how to safely reuse N95 respirators

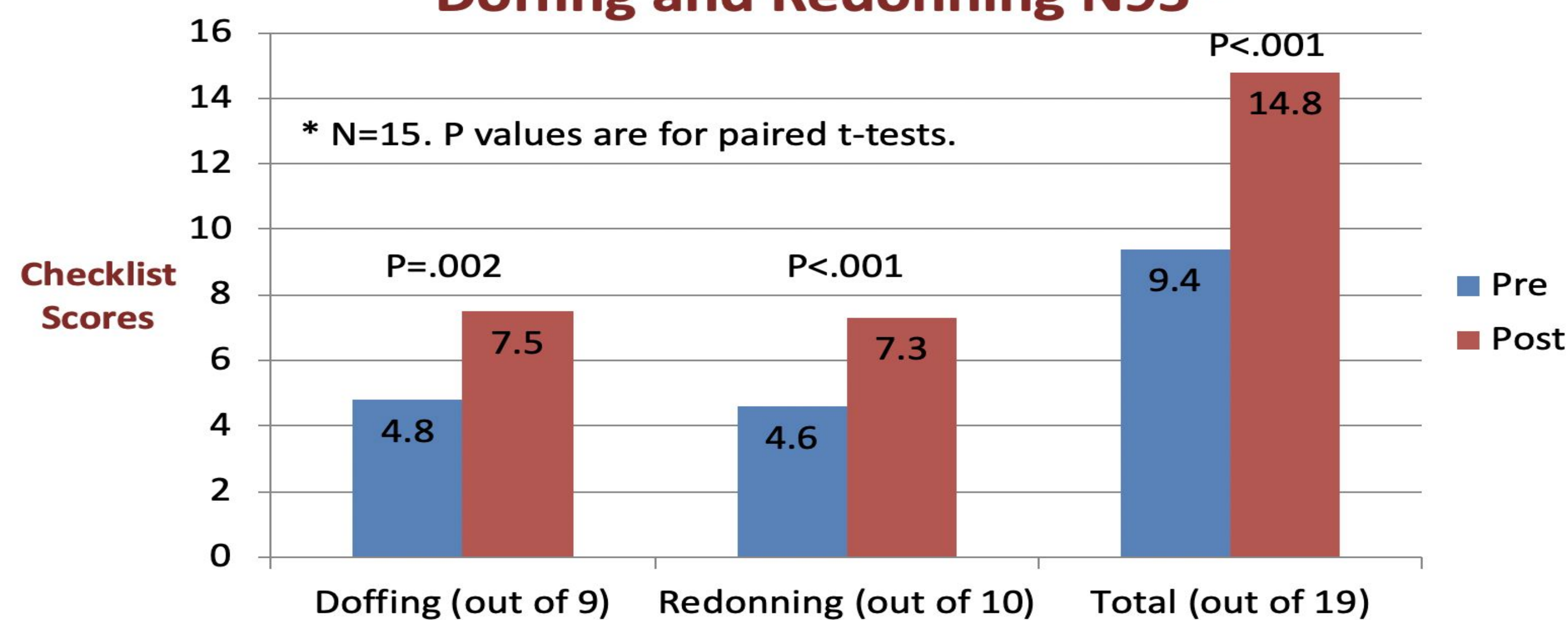
Innovative teaching materials and pre/post surveys using Qualtrics were placed in Zoom chat as hyperlinks

Unique checklist of skills to score performances was analyzed with survey data to determine increase in confidence and knowledge

Statistically significant improvement of skills and confidence in doffing and redonning N95 respirators



Pre and Post Simulation Performance Checklist Scores for Doffing and Redonning N95*



DISCUSSION

Covid-19 and subsequent social distancing forced educators to change traditional in-person teaching strategies required to prepare students for competency and licensure

This program was an effective and innovative strategy to remotely teach students an essential, evolving psychomotor skill virtually

Nurse educators need to develop scenario scripts and evaluation methods to suit the virtual environment

This process can be replicated and applied to a variety of other cognitive, psychomotor, affective skills and nursing competencies

