

Introduction

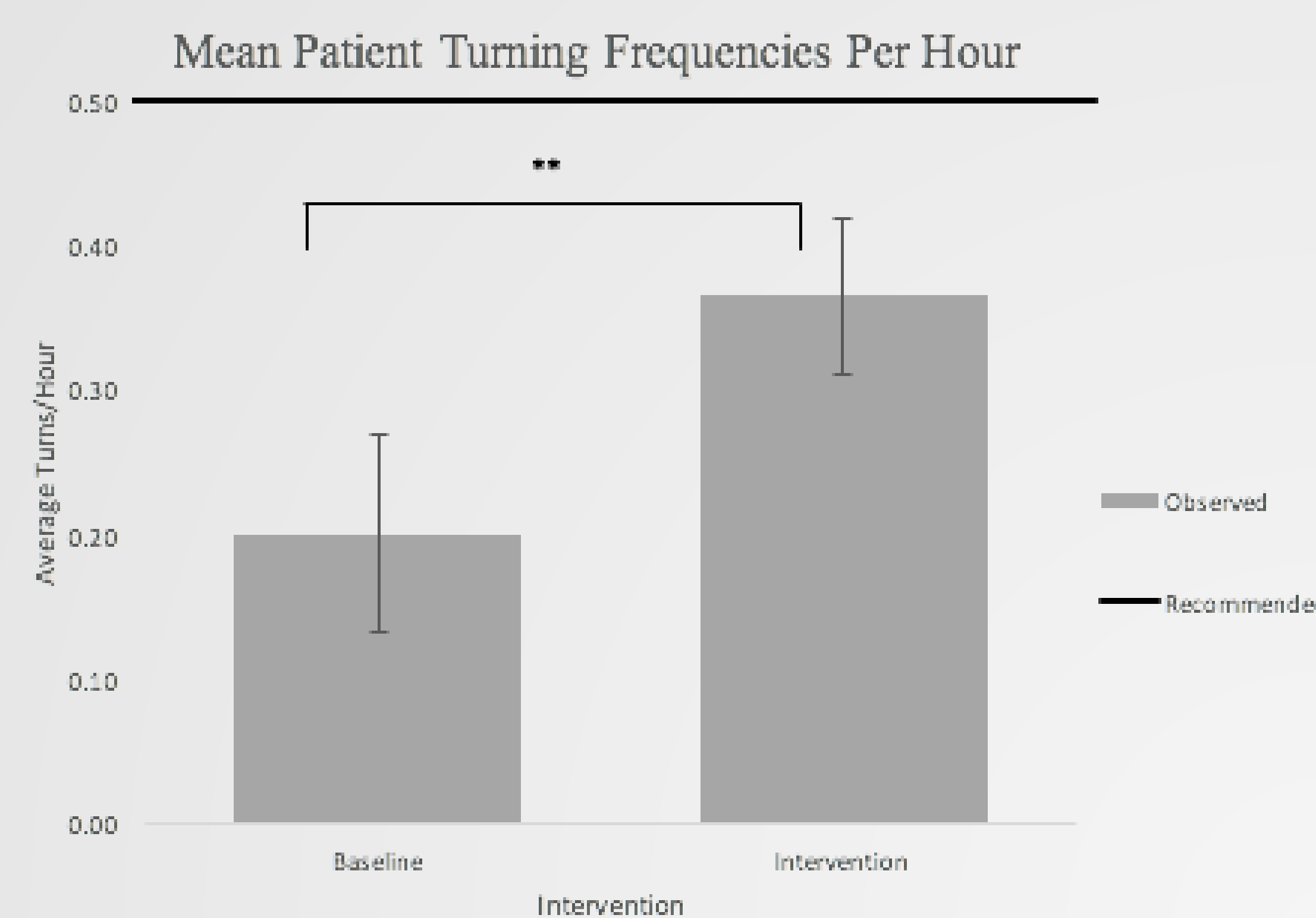
- A shortage of nurses in Uganda leads family members to become primary caretakers for patients.
- Caretakers have little to no knowledge of proper overall health management for patients.^{1,2}
- Lack of knowledge creates increased incidence of preventable deaths
- Whereas aspiration rates in the US are <1% , the rates in Uganda are astronomically higher.³
- Our education intervention aims to reduce these aspiration rates

General Aims

- To improve caretakers' knowledge and practice of patient feeding techniques
- To reduce patient aspiration pneumonia rates in MNRH

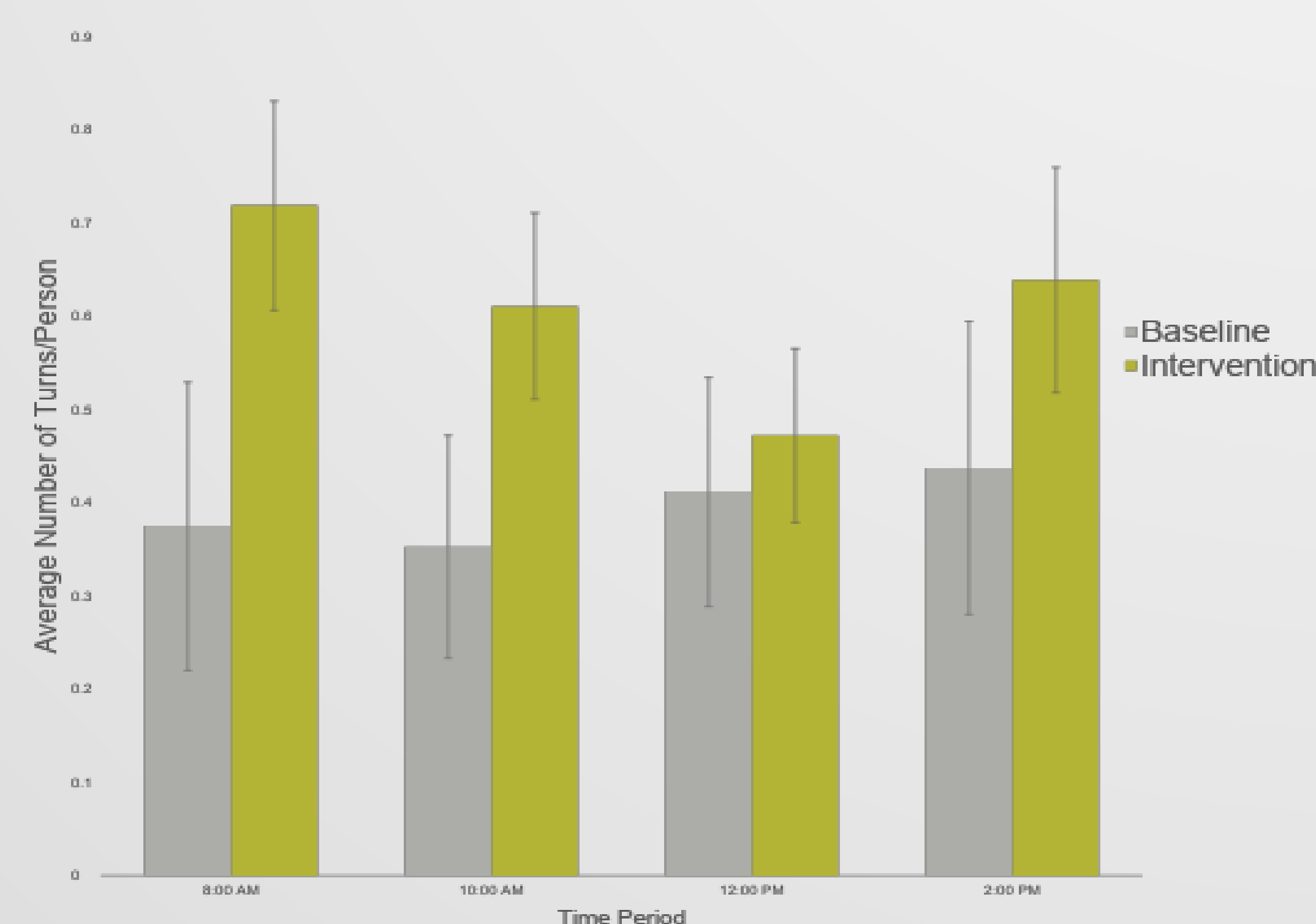
Previous Findings

QUANTITATIVE DATA ANALYSIS



“Recommended” line refers to the standard frequency to turn patients every two hours (0.5 turns / 1 hour). T-test revealed that differences were significant between Baseline and Intervention, $p < 0.05$.

Mean Patient Turning Frequencies During the Day



Frequency of turns increased after intervention compared to baseline observations.

QUALITATIVE DATA ANALYSIS

Main Themes	Raw Themes	Quotes from Participants
Satisfaction and Comprehension	<ul style="list-style-type: none"> Posters are education assistance tools Posters help reduce work burden of nurses Caretakers with low literacy can understand proper feeding techniques 	<p>“They taught me how to feed an immobile patient” (Caretaker 107)</p> <p>“It saves the staff time to answer questions because one can get that information from reading the posters.” (Caretaker 204)</p>
Barriers to Education	<ul style="list-style-type: none"> Some caretakers are unable to read poster information. 	<p>“It’s hard to explain if they speak another language.” (Staff 104)</p>
Gaps in Education	<ul style="list-style-type: none"> Not all important information about feeding can be represented in a poster. Need for posters in other languages 	<p>“Add more pictures to every poster to make those who don’t know to understand, especially for those who can’t read English/Luganda” (Caretaker 106)</p>
Usage	<ul style="list-style-type: none"> Posters are helpful reminders and guidance during feeding 	<p>“I always consult the poster when am going to feed the patient in order to know what to feed him” (Caretaker 204)</p>

Table 1: Summary of key themes identified from patient and caretaker interviews on Poster Intervention.

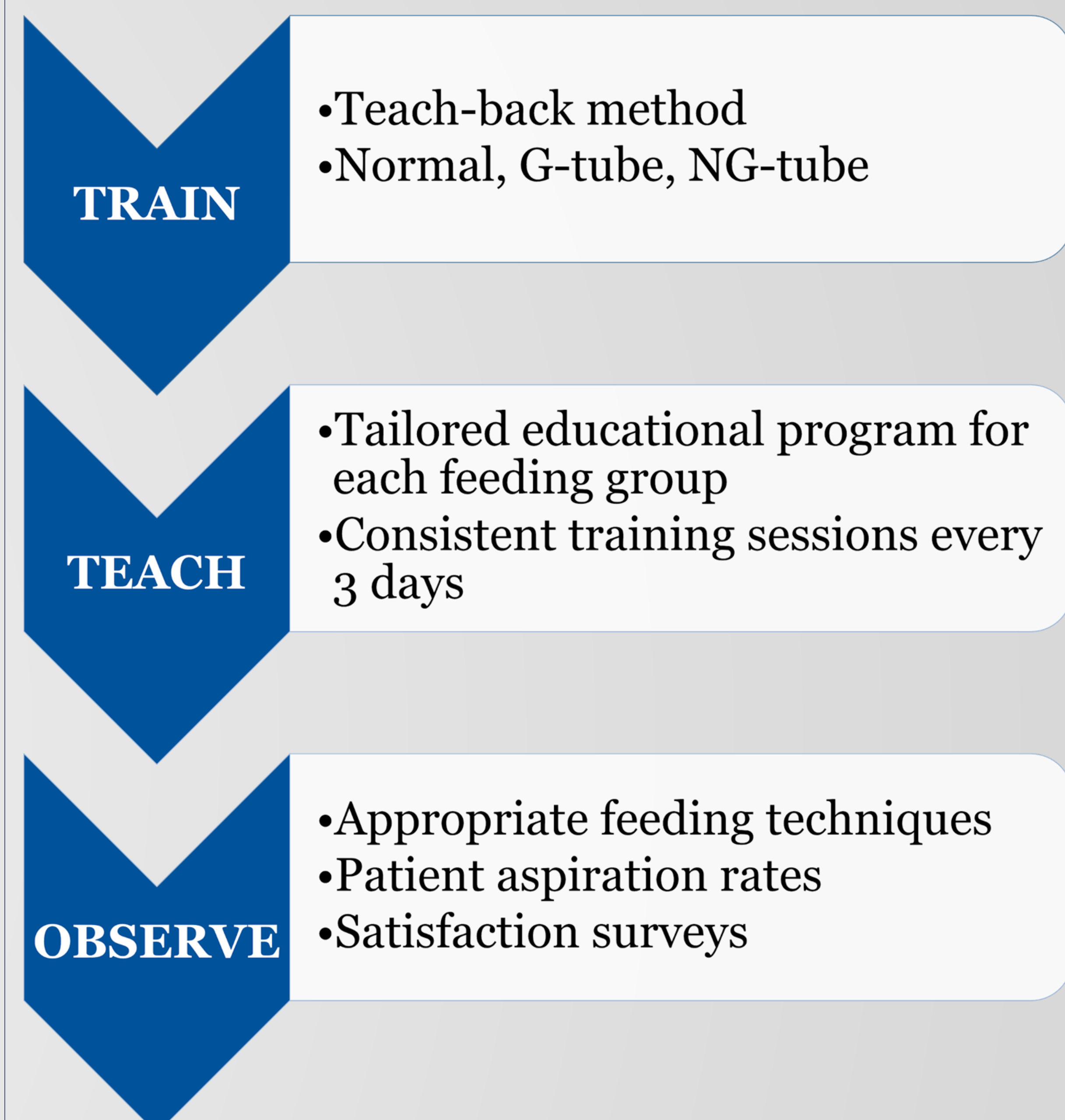
Main Themes	Raw Themes	Quotes from Participants
Satisfaction and Comprehension	<ul style="list-style-type: none"> Posters are education assistance tools Posters help reduce work burden of nurses Caretakers with low literacy can understand proper feeding techniques 	<p>“They taught me how to feed an immobile patient” (Caretaker 107)</p> <p>“It saves the staff time to answer questions because one can get that information from reading the posters.” (Caretaker 204)</p>
Barriers to Education	<ul style="list-style-type: none"> Some caretakers are unable to read poster information. 	<p>“It’s hard to explain if they speak another language.” (Staff 104)</p>
Gaps in Education	<ul style="list-style-type: none"> Not all important information about feeding can be represented in a poster. Need for posters in other languages 	<p>“Add more pictures to every poster to make those who don’t know to understand, especially for those who can’t read English/Luganda” (Caretaker 106)</p>
Usage	<ul style="list-style-type: none"> Posters are helpful reminders and guidance during feeding 	<p>“I always consult the poster when am going to feed the patient in order to know what to feed him” (Caretaker 204)</p>

Table 2: Summary of key themes identified from patient and caretaker interviews on Educator Intervention.

Main Themes	Raw themes	Quotes from Participants
Educator’s Interactions	<ul style="list-style-type: none"> Educator is accessible to caretakers and has a good relationship with them Educator taught caretakers the right way of feeding patients 	<p>“If you feed the patient while lying down, they might aspirate, but if you feed them the way the educator taught me, then it’s good for the patient” (Caretaker 203)</p>
Benefits of Intervention	<ul style="list-style-type: none"> Educator reduced workload of the nurses Educator is a good human resource and support to caretakers 	<p>“The doctors/nurses do not have enough time for us. Some of us do not know how to read the posters but having someone who tells you what is on the posters is very helpful.” (Caretaker 204)</p>
Barriers to Intervention	<ul style="list-style-type: none"> Other factors can still cause aspiration or improper feeding Constant change of caretakers can affect improved patient outcomes 	<p>“(Patients) keep changing attendants, which is why we have a problem with aspiration...a new caretaker came in the middle of the night and incorrectly fed the patient. Even though the primary caretaker had been educated previously, the mistake of the new attendant resulted in aspiration.” (Neurosurgery Resident 321)</p>

Table 3: Summary of key themes identified from patient and caretaker interviews on SMS intervention.

Next Steps



References

1. Sadigh, M., Nawagi, F., & Sadigh, M. (2016). The Economic and Social Impact of Informal Caregivers at Mulago National Referral Hospital, Kampala, Uganda. *Annals of Global Health*, 82(5), 866-874. doi:<https://doi.org/10.1016/j.aogh.2016.06.005>
2. Blumenstein, I., Shastri M. Y., Stein, J., Gastroenteric Tube feeding: Techniques, Problems and Solutions. *World Journal of Gastroenterology*. Retrieved October 30, 2018
3. Wu, C., Chen, Y., Wang, M., & Pinelis, E. (2017). National Trends in Admission for Aspiration Pneumonia in the United States, 2002–2012. *Annals of the American Thoracic Society*, 14(6), 874-879. doi:10.1513/annalsats.201611-867oc