

Routine Evaluation of Gastric Residuals in the Neonate

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Published In/Presented At

Martuscelli, M. Motichka, N. Nielsen, M. Roberts, K. Scholes, G. (2018, August 2). *Routine Evaluation of Gastric Residuals in the Neonate*. Poster presented at: LVHN Vizient/AACN Nurse Residency Program Graduation, Lehigh Valley Health Network, Allentown, PA.

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Background

- The current practice in the Neonatal Intensive Care Unit at LVHN is to check gastric residuals every 3 hours before feeding the neonate
 - The physician is notified if gastric residual is greater than 1/3 of the feed or if contents appear abnormal
- Current research shows that there is lack of evidence to support checking gastric residuals for feeding intolerance
- There is no standard of practice whether to refeed or discard gastric residuals
 - This lack of education can lead to nurses subtracting the gastric residual from the feeding making it longer for the neonate to achieve full feeds
 - Discarding gastric residuals can result in depletion of gastric stomach enzymes and/or cause electrolyte imbalances

PICO Question

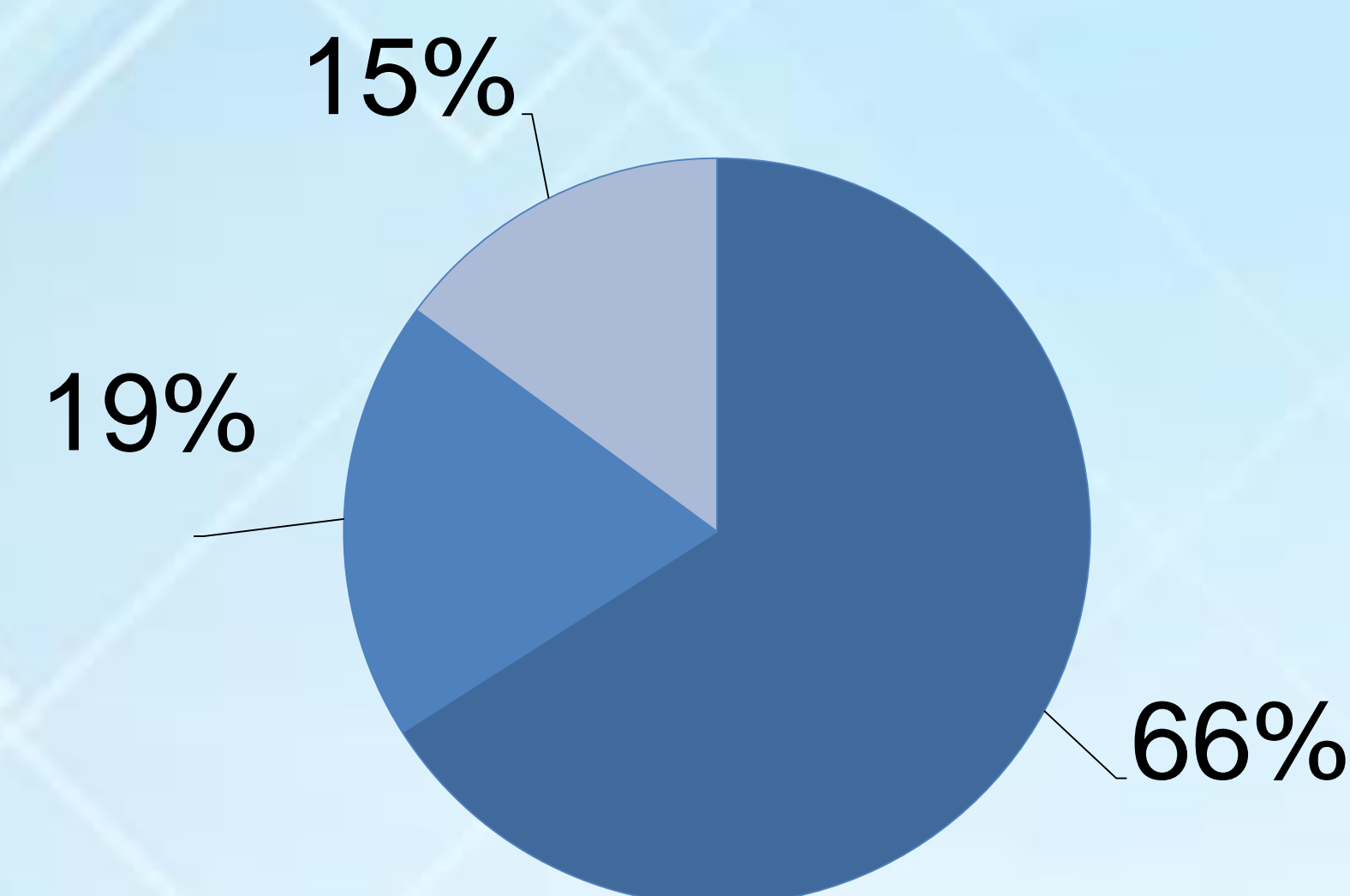
- In newborns in the Neonatal Intensive Care Unit with an indwelling nasogastric/orogastric tube, does not providing routine checks of gastric residuals compared with providing routine checks of gastric residuals decrease time to attain full feeds?

Implementation Results

- Data was collected on 24-34 weeks' gestation premature infants discharged from the NICU at LVHN
- Below is a chart of data collection to represent the number of days to achieve full feeds

Results

- Infants without feeding issues
- Infants with issues before achieving full feeds
- Infants with feeding issues after achieving full feeds



Total # of infants evaluated	Average day of life to full feeds	Range of days to full feeds	# of infants with issues <u>before</u> full feeds	# of infants with issues <u>after</u> full feeds
47	11	5-26	9	7

Results Continued

- Assessment findings of infants with feeding intolerance
- Increased abdominal girth, firm abdomen, bowel loops present, distention, decreased PO intake, high residuals, green bilious aspirates, black stools, respiratory decompensation due to sepsis, electrolyte imbalance, emesis, abdominal tenderness, mild acidosis, lack of stool, increased events, temperature instability, NEC, bowel pneumatosis, increase in FiO₂, abdominal tenderness, decreased activity, watery pink-tinged stool, lethargy, bloody stool, dilated bowel loops

Next Steps

- Education of staff on the new policy of not checking gastric residuals before each feed through an educational PowerPoint presentation in TLC
- Data will be collected to compare both pre-implementation and post-implementation findings
- Staff nurses will collaborate with the neonatal physician's to implement this project

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