

Use of a Camera System in the NICU and the Maternal Edinburg Postnatal Depression Scale (EPDS) Anxiety and Depression Scores

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Background/Purpose

- A camera system allows infants to be viewed remotely.
- The purpose of the study was to analyze the impact of camera use in the NICU on maternal EPDS anxiety and depression scores.

Methods

- Convenience Sample:
 - Inclusion criteria – mothers whose infants were born at MWH between June and December of 2024, admitted to the NICU for a minimum of 30 days, and utilized the camera system
 - Exclusion criteria – mothers < 19 years old, mothers that did not access the camera system, infant length of stay < 30 days
- The EPDS screening tool was administered to the mother
 - Prior to the mother's discharge from the hospital
 - Monthly while the infant was in the NICU
- Camera views were collected for the duration of each infant's hospitalization.

Analysis/Results

- N=66 mothers
 - Average age of mother – 32 years
 - Average infant gestational age at birth – 31 weeks
 - Average camera views – 443 views
 - Average infant length of stay – 58 days
- Bivariate relationships analysis between the number of camera views and depression and anxiety scores showed insignificant relationships.
- Multiple regression analysis using initial depression and anxiety scores and the interaction between the mother's history of medication for anxiety and/or depression and total camera views showed:
 - For mothers not on medication for anxiety and/or depression with an increased number of camera views there was a decrease in the average depression and anxiety scores. This decrease was not significant different than zero
 - For mothers on medication for anxiety and/or depression with an increased number of camera views there was a statistically significant increase in depression and anxiety scores
 - Depression: $b = .6344$, $p = .041$
 - Anxiety: $b = .2942$, $p = .0263$



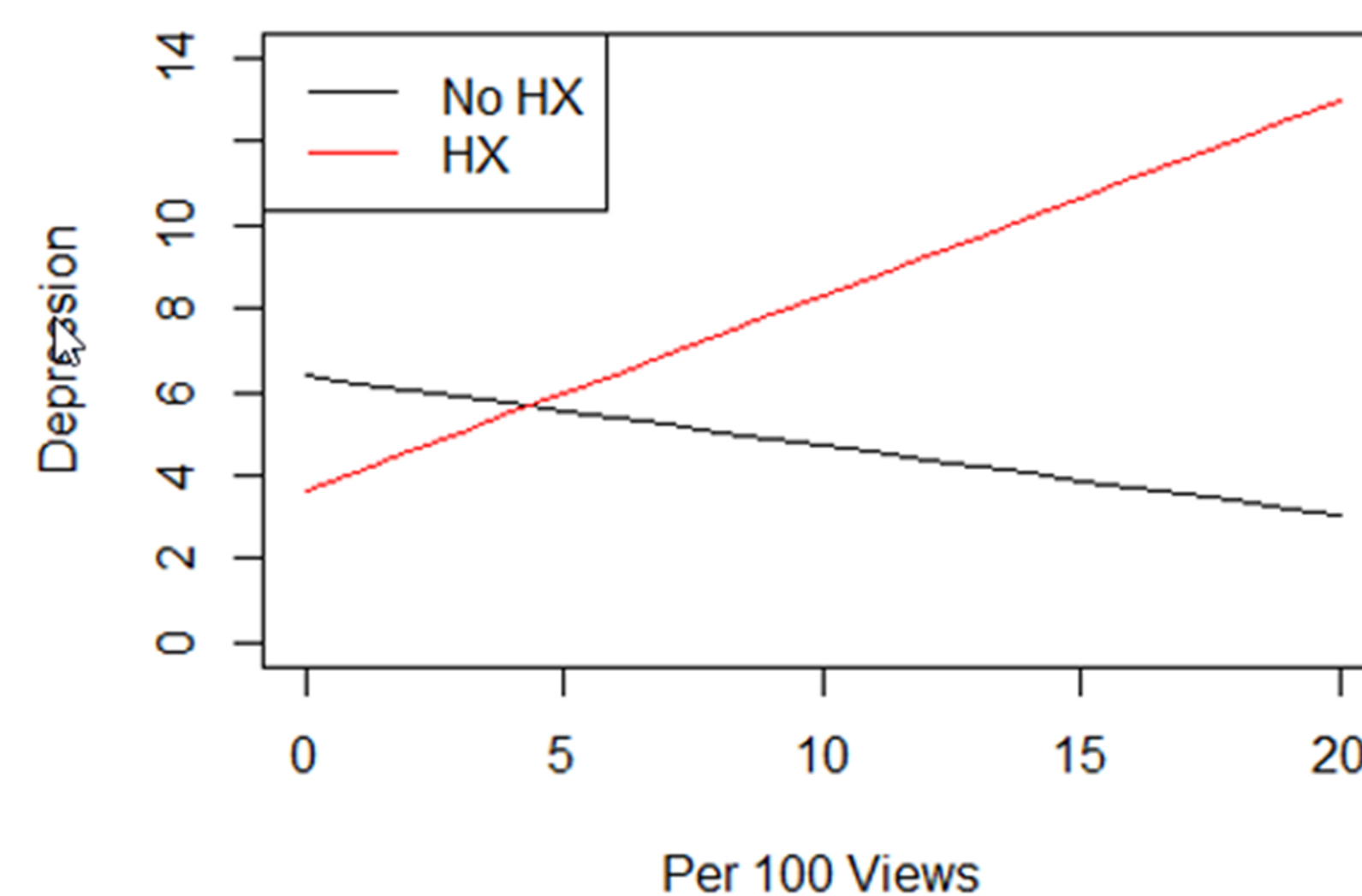
Discussion

- The impact of camera use on the anxiety and depression scores differed based on the mother's history of medication use for anxiety and/or depression and the number of camera views.
- Limitations:
 - Sample restricted to a single unit
 - No record of the actual times the camera views took place, so unable to evaluate longitudinal effects of the use of the camera on anxiety and depression scores.

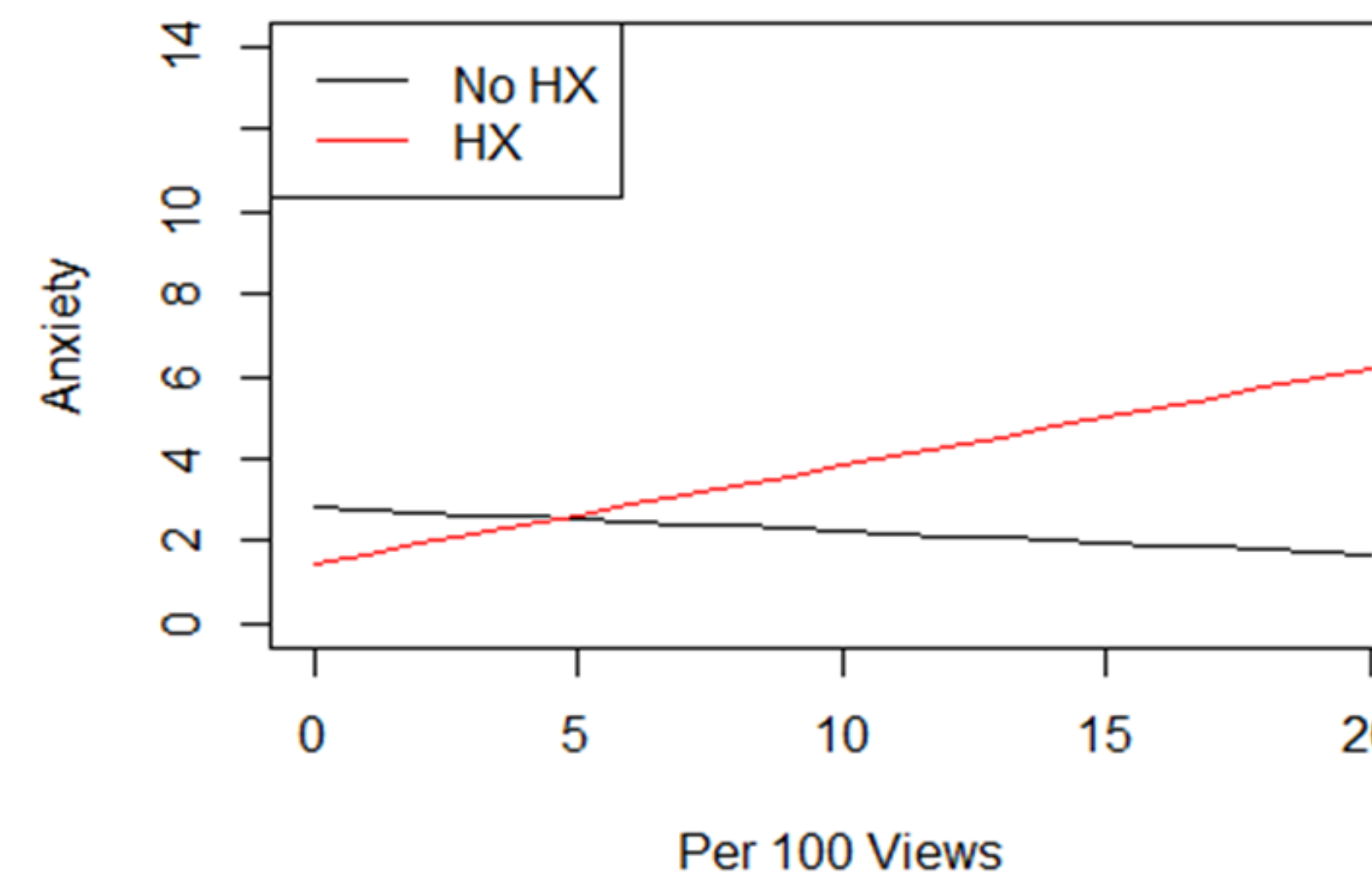
Conclusions/Implications for Practice

- Staff need to be aware that for a mother on a medication for anxiety and/or depression that an increase in camera views can contribute to an increase in anxiety and/or depression scores.
- Further research could include investigating moderating effects on other information collected such as length of stay and gestational age.

Interaction between camera views and a history of medication for depression



Interaction between camera views and a history of medication for anxiety



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