



State of the Science Congress on Nursing Research-Precision Health-2018

Abstracts of Distinction

Analysis of the Patient Preference for Engagement Tool

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Aims: It is crucial to assess patients' individualized preferences for their engagement in healthcare to better inform the planning and delivery of precision healthcare. Unfortunately, engagement efforts are often not tailored to individual patient situations, leading to patient frustrations and poor patient-centered care. The purpose of this study was to assess the psychometric properties of the newly-constructed 27-item Patient Preference for Engagement Tool (PPET).

Methods: The sample consisted of 311 adult patients aged 18-101, who were hospitalized on 8 medical, surgical, and oncology units within a 516 bed academic Magnet®-designated hospital in the Midwestern United States. Psychometric validation was conducted by calculating content validity indices (CVIs), conducting exploratory and confirmatory factor analysis, and calculating Cronbach's alpha reliability estimates.

Results: Following exploratory factor analysis, a six-factor solution was accepted and confirmed with CFA (RMSEA = 0.057, gammahat = 0.941, CFI = 0.828). Reliability of scores on the total scale and subscales were high: Cronbach's alpha ranged from .72 - .92. All items had a CVI of 0.8 or higher. Age, number of chronic illnesses, self-rated health status, and education level were not significant predictors of subscale or total scale scores, emphasizing that patient preferences for engagement should not be assumed based on personal and illness factors.

Conclusions: Preliminary analysis demonstrates acceptable reliability and construct validity of the PPET. Future research must be done to reduce the items on the tool to create a clinically-useful tool to precisely determine patients' individual preferences for engagement in their healthcare, leading to more personalized strategies within precision healthcare.

Breastfeeding reduces risk of Type 2 Diabetes in the (PETS)

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Aims: The purpose of this study was to assess the markers for type 2 diabetes (T2D) in association with duration of breastfeeding in the Peri/ postnatal Epigenetic Twins Study (PETS).

Methods: Cross-sectional research study of children 6-7 years of age participating in the PETS (n = 94). To investigate the relationship between duration of breastfeeding and T2D markers (insulin and Homeostasis Model Assessment Insulin Resistance levels [HOMA2-IR]).

Results: Infants breastfed for more than 4 months had significantly lower mean insulin levels (22.8 pmol/L; 95% confidence interval [CI], 4.05-22.0, P = 0.005) and significantly lower mean HOMA2-IR levels (0.41; 95% CI, 0.07-0.40, P = 0.005) than the infants breastfed for less than 4 months.

Conclusions: Breastfeeding for more than 4 months protects against the risk of developing insulin resistance associated with the development of T2D in the PETS children, supporting the idea that T2D may be partially programmed by nutrition in early life. Understanding the interactions of nutrition with our epigenome may allow healthcare providers to tailor education and interventions focused on early life nutritional habits to prevent T2D.

Choosing Wisely in Critical Care: National Survey Results

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