

## Journal Club Presentation:

## Is Medical Education Ready for Generation Z?

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Citation: Eckleberry-Hunt J, Lick D, Hunt R. Is medical education ready for generation Z. *J Grad Med Educ.* 2018;10(4):378-381

The article begins by pointing out how medical education should plan to make adaptations based on how different Generation Z is from other generations.

Generation Z are those born between 1995 and 2012. They are the only generation that has always had access to the internet and social networking, and hence have a hard time disengaging from technology. They are hardworking and independent in their learning but also prefer close mentoring relationships. Having always had access to technology and the internet, they want to know what they need to know in the moment and prefer not to spend long hours listening to lectures. Rather than the traditional approach to medical education, these students will both need and expect a customized experience.

Generation Z is known to have a shorter attention span compared to other generations, and expect material presented to them to be engaging. Since retrieving information has always been so easy for this generation, they lack the skills to be able to evaluate information and will need help to do so.

The authors suggest education of Generation Z should include modern technology, and creative modalities such as podcasts and simulations. This generation also expects quick and personal feedback. Active learning methods including reflection and discussion will be more useful with this generation versus traditional lectures.

The authors conclude by reminding us that the goal should always be to ensure quality patient care as we consider making these changes, although historically, medical education has been hesitant to make reforms.

### Relevance for NIDCAP

- The youngest parents and new staff coming into the NICU are Generation Z and will want to receive information as described by this article.
- The NIDCAP model involves observation and sharing that observation in a detailed narrative report to both staff and patients. Based on the findings of this article, both staff and patients may not engage with this material thus suggesting there is an immediate need for change.
- The new generation of NIDCAP trainees are likely to prefer more creative ways of sharing their observations. We suggest that these creative ways are embraced by the NFI.

## Journal Club Presentation:

## Early Parenting Intervention – Biobehavioral Outcomes in Infants with Neurodevelopmental Disabilities (EPI-BOND): Study Protocol for an Italian Multicenter Randomized Controlled Trial

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Citation: Montirosso R, Rosa E, Giorda R Early Intervention Study Group, et al Early Parenting Intervention – Biobehavioral Outcomes in infants with Neurodevelopmental Disabilities (EPI-BOND): study protocol for an Italian multicenter randomised controlled trial *BMJ Open* 2020;10:e035249. doi: 10.1136/bmjopen-2019-035249

### Overview

Infants with neurodevelopmental disability are at risk for altered behavioral and socio-emotional patterns. The present longitudinal, multi-center interventional clinical trial aims at assessing the effectiveness of an early parenting intervention based on video-feedback technique (VFI) to support maternal responsiveness (parental sensitivity) and the socio-emotional

development of infants with developmental disabilities using a multi-layer approach to outcomes assessment (behavioral, neuroendocrine and epigenetic outcomes).

The study plans an estimated enrollment of 180 participants, randomized into parallel assignment intervention model with double masking participant, outcome assessors. The study start date was September 2019 and estimated completion date was December 2021.

### Study design

Inclusion criteria

- Infants: Age range 3-18 months with mild- moderate psychomotor delay

- Mothers: Age > 18 years, living with the father of the infant and mastery of Italian language

#### Exclusion criteria

- Infants: Presence of severe sensory deficits and genetic syndrome with known functional implications for epigenetic regulation of target genes
- Mothers: Documented mental disorder and documented disability

## Methodology

- The intervention group will include dyads of mothers and their infant with developmental disability who are exposed to the VFI focused on different domains of mother-infant quality of interaction (number of sessions: 6)
- The control group will have dyads of mothers and their infant with developmental disability who will receive phone calls focused on obtaining descriptions of different domains of infant behavioural development instead of the VFI, (number of sessions: 6).

#### Primary outcome measure:

- The study will have four assessment sessions: T0- baseline, T1- Post intervention, T2- Short-term follow-up (3 months) and T3- long-term follow-up (6 months).
- Improvement of infants' behavioural and socio-emotional regulation will be measured by GRS coding system, based on infant behavioural regulation as well as Face-to-Face Still Face (FFSF) double exposure paradigm from a 10 minute unstructured mother- infant interaction with standard set of toys.
- Developmentally supportive parental behaviour (maternal sensitivity) will be assessed by the PICCOLO coding system

as well as Face-to-Face Still Face (FFSF) double exposure paradigm from a 10 minute unstructured mother-infant interaction with a standard set of toys.

- Salivary samples of mother and infant for cortisol and oxytocin will be collected at each assessment session (additional samples for infants will be taken at 15 (reactivity) and 30 (recovery) minutes after the FFSF procedure.
- Change in hormones and capital Salivary oxytocin concentrations will be assessed for differences between and within group by generalized linear model.
- The hypothalamic-pituitary -adrenal (HPA) axis stress regulation will be assessed in terms of direction and magnitude.
- DNA methylation of target genes will be assessed at specific CpG sites by separate saliva samples of infants for epigenetic analysis at the end of the FFSF procedure.

#### Feasibility outcome measures

- Feasibility of the interventions will be assessed by 'acceptance of the intervention' and 'maternal experience' with VFI rating scales from mothers, at T1.

## Relevance for NIDCAP

- Brings new evidence to promote early intervention for mothers of infants with developmental disabilities.
- Provides a common early intervention program to optimize healthcare costs.
- Introduces an innovative approach to early parenting intervention for families of infants with developmental disabilities by studying the epigenetic variations.

## Journal Club Presentation:

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# Thematic Brief: Nurturing Care for Every Newborn

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Citation: World Health Organization, United Nations Children's Fund, World Bank Group. Nurturing care for every newborn (in progress). Geneva: World Health Organization; 2021.

## Summary

The first hours, days and weeks after birth are a precious time for a newborn's survival, health and development. Knowledge

and tools are available to provide every newborn with nurturing care that involves parents and other caregivers directly. To create the enabling environment for providing such care, there is a need to invest in policies, health systems and community awareness. As more newborns survive, we now need to make sure that they also thrive. This is especially important for those at greatest risk: small and sick babies who are more likely to die or suffer more illness. This Thematic Brief summarizes why nurturing care is essential for every newborn. Nurturing care comprises five interrelated and indivisible components: good health, adequate nutrition, safety and security, responsive