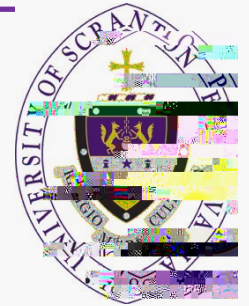


THE IMPACT OF FAMILY-CENTERED CARE ON MOTOR FUNCTION IN PRETERM INFANTS: A SYSTEMATIC REVIEW



LAUREN BYRNE, SPT

DIANA FRANCESCHELLI, SPT

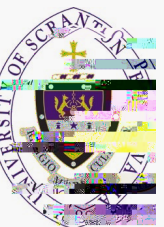
LAURA IOBST, SPT

HAILEY KENYON, SPT

NICHOLAS RODIO, PT, DPT

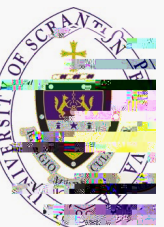
OVERVIEW

- Objectives
- Background
- Purpose
- Methods
- Results
- Conclusions
- Clinical Relevance
- Limitations
- Areas for Future Research



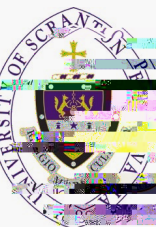
OBJECTIVES

- By the end of this presentation, participants will:
 - the components and benefits of family-centered care
 - the importance of integrating this approach into a physical therapy plan of care for the pediatric population
 - appropriate outcome measures to assess improvements in the motor performance of preterm infants



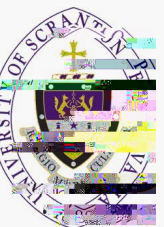
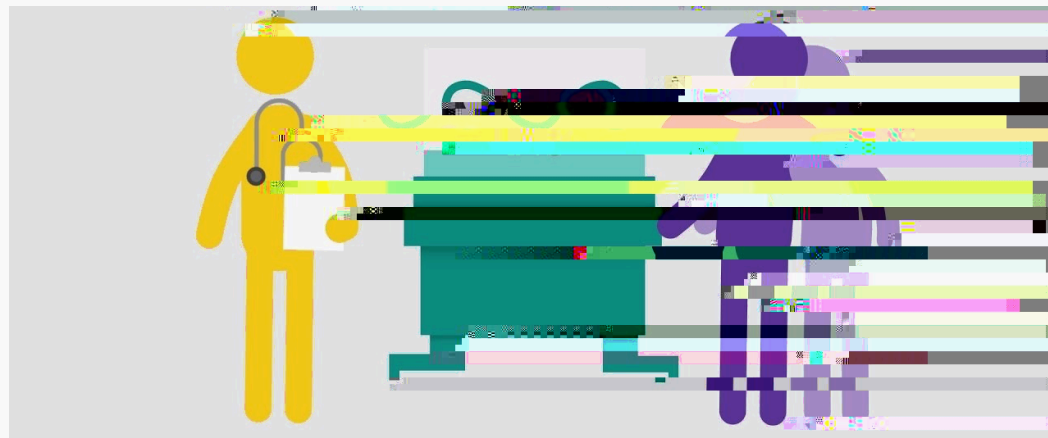
BACKGROUND

- Family-centered care: an approach to healthcare decision-making involving the patient, the family, and the health care provider¹
 - Promotes a relationship in which family members and professionals work together to ensure the best services for the child and family²
 - Recognizes that negotiation is essential in a collaborative relationship and puts mutual commitment of all parties at the forefront²



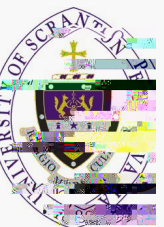
BACKGROUND

- Family-centered care is considered the standard of pediatric health care by many clinical practices, hospitals, and health care groups.¹
- However, despite widespread endorsement, it continues to be insufficiently implemented into clinical practice.¹



BACKGROUND

- Preterm infants defined as those born before 37 weeks of gestation: late preterm (32-37 weeks), very preterm (28-32 weeks), or extremely preterm (<28 weeks).³
- Preterm infants are at greater risk for both short and long-term health problems, including serious breathing problems, feeding problems, visual and hearing impairments, learning difficulties, as well as developmental delays.^{4,5}





BACKGROUND

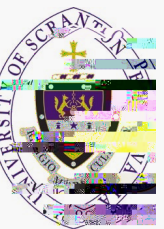
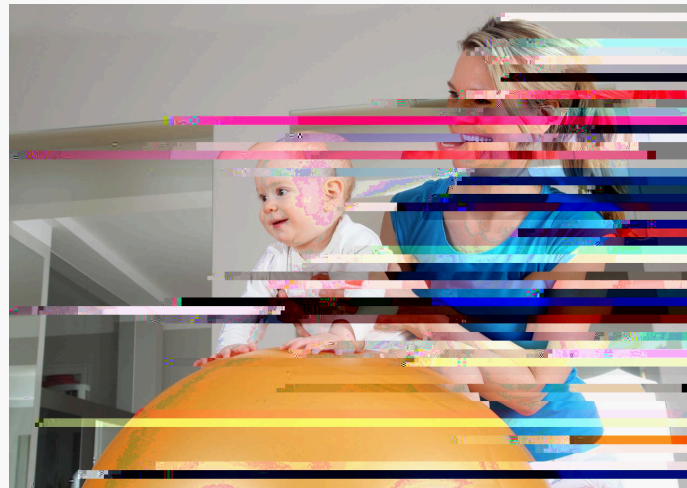
BACKGROUND

- A physical therapy session involves working with the preterm infant on developing strength, addressing muscle and joint dysfunction, and working toward achieving developmental milestones.⁵
- Family centered care and parent education of the physical therapy plan of care are becoming primary components of the early intervention process to promote proper development and milestone achievement in infants.⁷



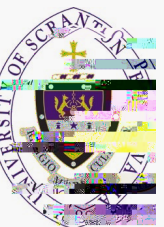
PURPOSE

- The purpose of this study was to evaluate the current literature on the effectiveness of family-centered care on motor performance in preterm infants compared to standard care.



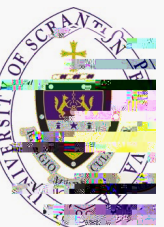
METHODS

- Databases
 - CINAHL (EBSCO)
 - Proquest Health and Medical Collection
 - Pubmed MedLine
 - Wiley Online Library



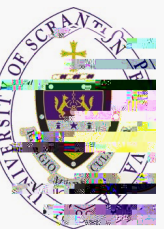
METHODS

- Search Terms
 - (“parent-administered” OR “family-centered” OR “parent education” OR “home based”) AND (“physical therapy” OR “exercise”) AND (“preterm infants” OR “premature infants”)



METHODS

- Search Limits
 - English
 - Journals
 - Human subjects
 - 2012-2022

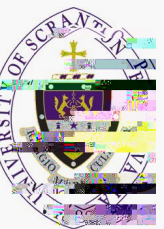


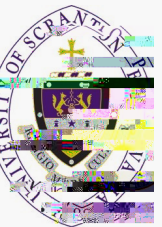
METHODS

- Methodological Quality:
 - Two independent reviewers
 - Oxford Center for Evidence Based Medicine 2011 Levels of Evidence (OCEBM)



METHODS







RESULTS



_____	_____ _____			



_____	_____			

RESULTS

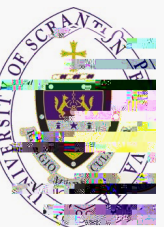
4.8 - 5.2 points on the Alberta Infant Motor Scale (AIMS) after 4 weeks of intervention

5.5 - 18.0 points over the course of 4 weeks - 18 months on the Infant Motor Profile (IMP)

26.4 points after 3 weeks of intervention on the Test of Infant Motor Performance (TIMP)

11.6 points after 12 months of intervention on the motor domain of the Bayley Scale of Infant Development (BSID-III)

Fine motor skills on the Ages and Stages Questionnaire (ASQ-3) improved by 2 points over 8 months



CONCLUSIONS

- Skilled physical therapy interventions involving family-centered care leads to improved motor performance in preterm infants.



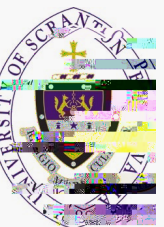
LIMITATIONS

- Varied sample size
- Varied outcome measures used
- Interventions inconsistent between studies
- Short intervention duration
- Lack of follow-up
- Variable parental compliance
- Lack of blinding of subjects and therapists



ACKNOWLEDGMENTS

- Ian O'Hara
- Renee Hakim, PT, DPT, PhD
- University of Scranton DPT Faculty and Staff





1. Kuo DZ, Houtrow AJ, Arango P, Kuhlthau



Question ?

