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# Early vs. Delayed Umbilical Cord Clamping

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# Early Vs. Delayed Umbilical Cord Clamping

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## PATIENT CARE ISSUE

### Background & Significance

- Nearly 4 million infants born annually in U.S.<sup>6</sup>
- Events during birth can have life-long implications
- Early cord clamping associated with decreased risk of jaundice<sup>4,5</sup>
- Delayed cord clamping associated with decreased risk of anemia<sup>1,2,3,5</sup>
- Parents deserve knowledge and autonomy concerning care of their infant

## EVIDENCE-BASED PRACTICE QUESTION

**Question:** Does Early or Delayed Umbilical Cord Clamping yield better outcomes for term infants?

**P:** Term neonates and their parents

**I:** Early vs. delayed umbilical cord clamping

**C:** Impact of timing of clamping on neonatal health status

**O:** Parental education on timing of clamping specific to health context

## REGISTERED NURSE INTERVIEW

- Nurse recommends delayed umbilical clamping
- Helps adjustment to extra-uterine life
- Parents often not aware of options
- Depends on individual situation
- No current hospital policy



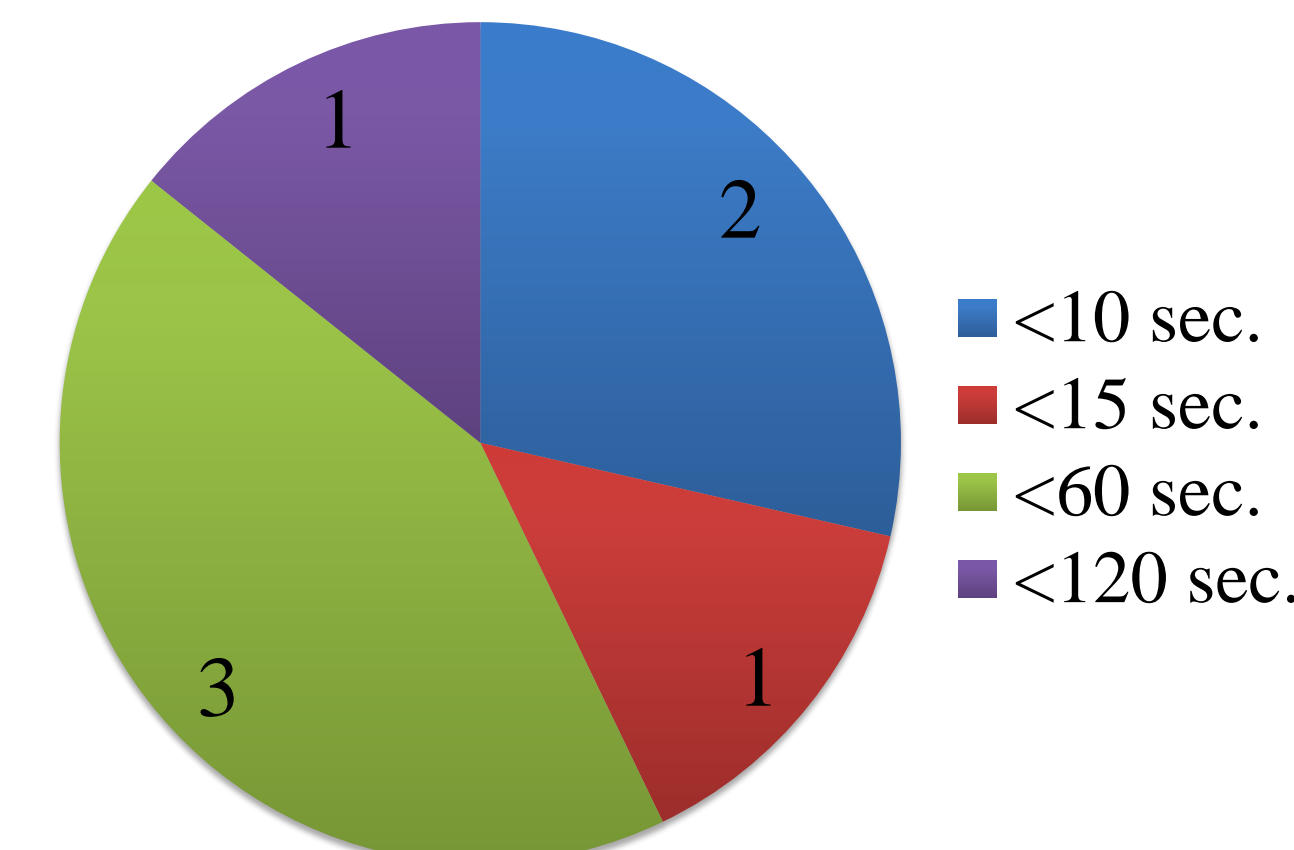
[http://www.google.com/imgres?um=1&hl=en&sa=N&tbo=d&biw=1777&bih=898&authuser=0&tbn=isch&tbnid=orAAzF\\_7hF942M:&imgrefurl=http://birthofanewearth.blogspot.com/2011/09/clamping-of-umbilical-cord-too-soon-may.html](http://www.google.com/imgres?um=1&hl=en&sa=N&tbo=d&biw=1777&bih=898&authuser=0&tbn=isch&tbnid=orAAzF_7hF942M:&imgrefurl=http://birthofanewearth.blogspot.com/2011/09/clamping-of-umbilical-cord-too-soon-may.html)

## METHODS

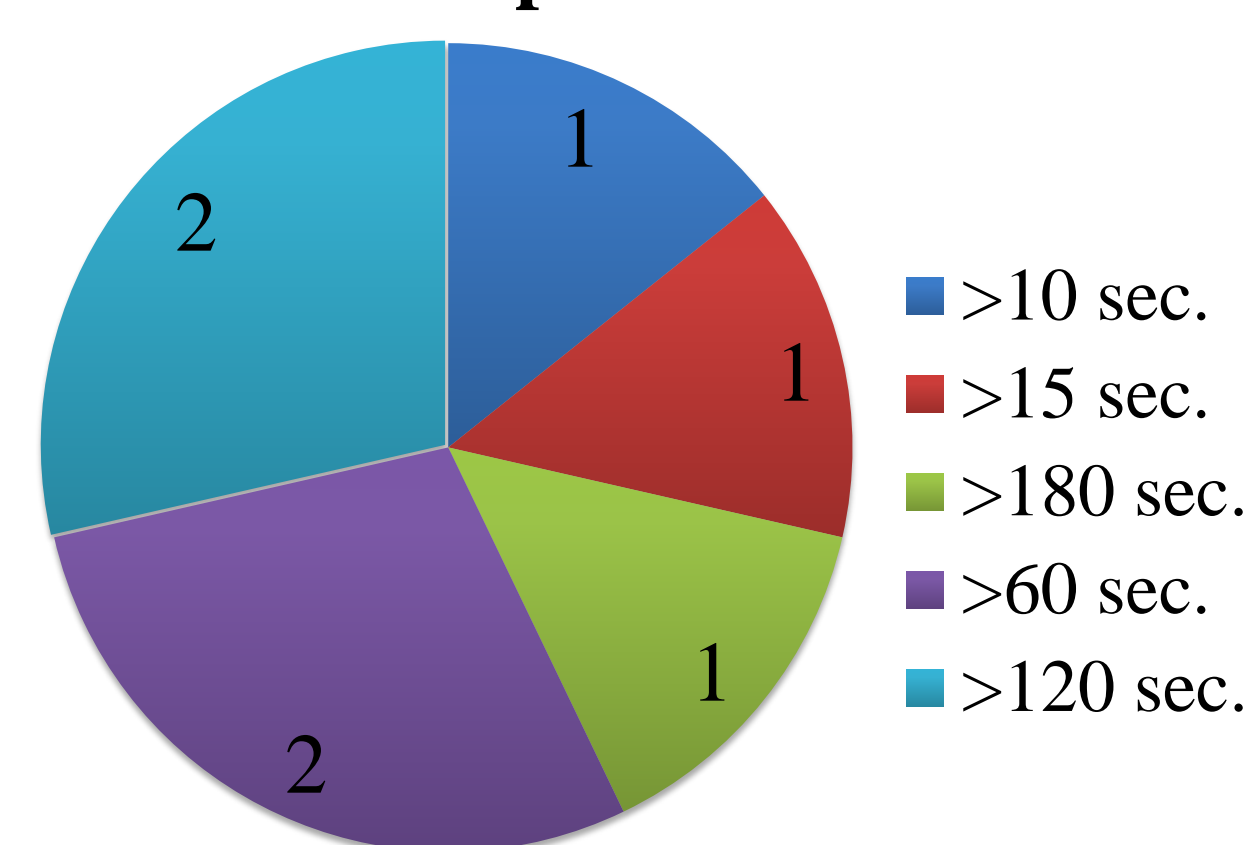
- Databases: Academic Search Premier, CINAHL, Cochrane Library, Joanna Briggs Institute, MEDLINE, PUBMED
- Key Words: delayed, cord, clamping, delivery, umbilical cord clamping, early, late
- Inclusion: research on term infants, research on risks and benefits of delayed and immediate clamping
- Exclusion: Articles published >5 years ago

## RESULTS

### Early Cord Clamping Comparisons



### Delayed Cord Clamping Comparisons



	Higher with Early Clamping	Higher with Delayed Clamping
Iron Levels <sup>1,7</sup>		X
Hemoglobin Levels <sup>1,2,4,8</sup>		X
Incidences of Anemia <sup>1,2,3,5</sup>	X	
Incidences of Polycythemia <sup>3</sup>		X
Incidences of Jaundice <sup>4,5</sup>		X

## SYNTHESIS OF EVIDENCE

- Early clamping decreases risk of polycythemia, increases risk of anemia
- Not enough evidence to clearly take sides between early vs. delayed
- Delayed clamping decreases risk for anemia
- Research indicates delayed clamping

## EVIDENCE-BASED PRACTICE RECOMMENDATIONS

- Nurses –aware of different options
- Parents –education on options
- Field – agree on definitions<sup>1,5,8</sup>
- Field –more research<sup>1,4,6-8</sup>

## LIMITATIONS

- Inconsistent definitions of early and delayed clamping
- Research conducted in a variety of cultural contexts

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