

The Relationship between Artificial Oxytocin (Pitocin) Use at Birth for Labor Induction or Augmentation and the Psychosocial Functioning of Three-year-olds

SUMMARY OF FINDINGS OF THE STUDY

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The focus of my dissertation research study was, as you can see by the above title, an exploration of whether there is any relationship between the use of Pitocin (artificial oxytocin) to start or speed up labor, and the way children born with its use function individually and in their relationships when they are three years old. I was interested in Pitocin use because what I read suggested that around two-thirds of inductions are now for non-medical reasons, but there wasn't a lot of research to tell us whether there were any specific consequences to the child of this use.

Before starting this research I first interviewed six therapists who work with babies, children, and adults to resolve issues arising from challenging prenatal or birth experiences. All the therapists had worked with clients who had been born with the use of Pitocin. The therapists told me what they had observed and learned about their clients and the role they thought Pitocin played in their functioning. I performed a content analysis on the interview transcripts, and about two years later, had a long list of "items" that eventually became the raw material for a survey to be conducted with mothers of three-year-old children. I sent this list to the six therapists with a voting form, and they helped me select which items best represented the various areas of functioning about which I planned to ask the mothers.

Eventually, this list became the survey you were invited to complete. Ultimately, I had 498 completed surveys that could be analyzed to see if Pitocin use appeared to be related to a difference in how three-year-olds functioned. The following is a summary of the findings that were statistically significant.

1. Receiving Pitocin resulted in more negative recollections of labor and delivery, suggesting that mothers who received it had a more challenging experience than those who didn't. However, there was a similar finding for the use of epidural anesthesia and for pain medication, both of which tend either to precede or follow the use of Pitocin.
2. Mothers who received Pitocin spent less time with their babies in the first hour after delivery, and were less likely to feed their babies exclusively at the breast in the first six months. In other words, babies who were born without Pitocin were more likely to be fed exclusively at the breast in the first six months than those born with Pitocin
3. Two factors distinguished children born with Pitocin from those born without Pitocin.

The first was called "Assertiveness", which describes a socially appropriate way that babies and children communicate their need for help and comfort when they are feeling uncomfortable or unsafe. Typically, crying, using facial expressions and physical gestures, and later, verbalizing their thoughts and feelings, elicits helpful responses from parents, who try to identify and meet the need

the baby or child is expressing. However, babies born with Pitocin, whose mothers reported having had a more challenging time during labor and delivery, appear to have a higher need to be assertive because they seem to experience more discomfort, but are apparently less effective in asserting their needs and getting them met when they feel unsafe or uncomfortable.

The second factor was called “Need to Control Environment” and this summarizes what seems to be a higher level of discomfort or insecurity, particularly in response to “outside-in” influences (e.g., reacting to food with digestive problems or being picky eaters; problems coping with other people’s timing and structure, refusing help from others) and increased or exaggerated efforts to control their environment, resulting in behaviors that may be more challenging to their mothers/family. There appears to be some continuity of effects between infancy and age three: for example, children who were described as picky eaters, or as having digestive problems at three, were likely to have been colicky, fussy babies. Interestingly, the hormone oxytocin is very involved in the digestive process: it plays a role in the production of digestive enzymes and as we enjoy our meal, in a positive feedback loop, we produce more oxytocin.

It may be that a process described as “hormonal imprinting”, identified in a considerable number of animal studies since the 1970s, is the mechanism that accounts for these differences between children exposed to Pitocin and those who were not. Using Pitocin to initiate labor may “flood” the available oxytocin receptors in mother and baby, apparently affecting children’s internal comfort levels and how they interact with others, although how this takes place in the babies has not yet been studied. Since both mother and baby receive Pitocin during labor and delivery, it is as yet unclear to what degree each contributes to challenges in their mutual relationship.

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July 2008