METHODOLOGICAL STUDY ON C-SECTION

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INTRODUCTION

In the United States the rate of cesarean section reached a peak of 26.1 percent in the summer of 2003 (O'Mara, 2003). Some of the consequences of this fact have been considered from the perspective of the mother giving birth, as for example how women who give birth by cesarean section are four times more likely to die during birth than those who give birth vaginally, or the effects of epidural anesthesia for the mother. The purpose of this paper is to analyze some of the consequences of cesarean birth for the offspring, and to introduce the work that several authors (Grof, 1975, 1980; Mandel & Ray, 1997; English, 1985; Emerson, 2001; Castellino, 2003) have done concerning the traumatic consequences of cesarean birth for the mother and the child, and how this kind of birth imprints the way the child negotiates their everyday world.

Defining cesarean birth: Surgical incision of the walls of the abdomen and uterus for delivery of offspring.

Historical perspective

Otto Rank, a protégé of Freud, was the first psychologist on record (1929) to address in depth the subject of birth trauma. He applied psychoanalytic theories to the study of this

subject and developed the hypothesis that anxiety neurosis was caused by the profound psychological trauma that happens at birth. Although Rank based his hypothesis on Freud's postulation that all anxiety is founded in anxiety at birth, Freud never supported Rank's major contribution to psychoanalysis (1993).

Even though Rank's ideas went unacknowledged for many years, by the middle of the twentieth century several practitioners began to recognize what Rank had stated years before. Winnicott, a pediatrician also trained as a psychiatrist in the psychoanalytic tradition, worked extensively with infants and mothers, and clearly recognized the impact of birth on his clients (1958). A British psychiatrist named Frank Lake was one of the first to acknowledge the effects of intrauterine life and the trauma of birth (1980). Stanislav Grof, who started his work in the 1950s experimenting with LSD, witnessed many clients revisiting their birth. As a result of his extensive clinical experience, he developed the four basic "perinatal matrices": Primal union with mother, cosmic engulfment and no exit or hell, the death-rebirth struggle, and the death-rebirth experience (1992).

In the last twenty years more and more psychologists, doctors and body practitioners are coming to recognize and understand the amount of trauma that happens at birth and to correlate this experience with the behavioral, emotional and psychological imprinting in the offspring.

The way that most therapists have started to gather information about the implications of birth for the mother and the child has been through direct clinical experience with *adults* as clients were referring to their births and showing that how they

experienced it had a remarkable imprinting in their personalities (Grof, 1975; Chamberlain, 1991; Mandel & Ray, 1997). In the last fifteen years some therapists (Emerson, 1987; Castellino, 1997) have started to work directly with *infants and children* and to correlate their birth history with their behaviors and emotional and psychological reactions.

Cesarean birth and behavioral, emotional and psychological imprinting

The cesarean birth is a surgical intervention in which the baby, instead of coming down and out of the birth canal, is removed from the uterus through an incision in the abdomen of the mother. This surgical intervention implies several things:

-The transition between being inside the mother and outside happens in just a couple of minutes (instead of several hours, as [it] usually happens in a vaginal birth).

-There is an interruption of the natural way of being born, and the child is deprived [from] of the boundary-giving experience of labor.

-Mother and child receive external help in their process of birth from the medical team.

-There is a need for anesthesia in order to perform this surgical intervention. The anesthesia and the surgery interrupt the natural production of labor hormones.

-As a consequence of cesarean surgery, the process of bonding and nursing that normally happens after birth gets interrupted and often postponed to a later time when mother and child have recovered from the effects of the drugs. (Klaus, Kennell & Klaus, 1995).

-Cesarean birth can happen after labor has started or before. It can also be planned or occur in emergency situations.

The circumstances described above may have specific behavioral, emotional and psychological imprinting on the child being born via cesarean section. Several authors have been studying their clients (and sometimes themselves as well), in order to recognize and understand this imprinting.

Anecdotal studies on cesarean birth being done with adults

English (1985) in her book *Different doorway: Adventures of a cesarean born*, presents her personal journey of self-discovery and experience of being born via non-labor cesarean, as well as several interviews with other cesarean born individuals. Among her comments in an article published in 1992, she refers to the sense of timing and completion of the non-labor cesarean birth:

> A cesarean birth is fast, taking only a few minutes rather than hours. Yet even within this quick experience there are abrupt swings between positive and negative feelings. Or, looking at it more comprehensively, a cesarean is very slow, taking years to complete the sense of being born. (English, 1992, p. 5).

Leverant, (2003) a somatic and archetypal depth psychotherapist presents his findings about cesarean birth out of his own labor cesarean birth and his work with clients. He states that:

> The matrix beliefs arising out of the labor cesarean birth experience can include: self support is not possible; completion is in someone else's hands; I expect to be

rescued: life is an unconscious activity; violence is normal; I am fundamentally flawed; through drugs I can return to life. (Leverant, 2003, p. 6).

Mandel & Ray (1997), based on their therapeutic experience with adults using rebirthing, conducted a study in which they correlated the way adults establish relationships and their birth experiences. Some of the characteristics of cesarean born subjects is that it is hard for them to make decisions and that they have difficulties in finishing or completing things.

On the other hand, McCracken's (1989) doctoral research concluded that there are not correlations between certain personality constructs and non-labor cesarean birth. However, her results imply that the caesarean born may compensate to hide their differences in a vaginally born culture.

Anecdotal studies on cesarean birth being conducted with adults and children

William Emerson (2001) is one of the pioneers of treating birth trauma. He initiated doing therapy with infants in 1973, and out of twenty years of clinical and behavioral observation of cesarean born babies, children and adults he has studied the physical and psychological effects of this type of birth, and suggests a list of common traits of cesarean born children. Among those, we have selected two:

Stuck and unable to move. Many cesarean sections occur because babies fail to progress. When these babies grow up and are asked about their births, they invariably say they felt "stuck and unable to move". When asked about their childhoods, they invariably say that they felt "stuck and unable to get going" during

difficult developmental periods, major transitions, or difficult tasks.

Giving up. Many regressed adults report that they struggled during their births and eventually gave up. They indicated that this pattern of behavior plagued them in their adult lives, that they struggled in life and tended to give up in some important way after an extended period of striving. (Emerson, 2001, p. 185).

Ray Castellino (2003) has been working in the field of prenatal and perinatal trauma resolution for many years with adults, babies and children. He agrees with Emerson that many clients born by cesarean have a hard time completing tasks (incompletion syndrome), and also have pacing difficulties, among many other characteristics.

METHODS

Total Sample of mother-infant dyads.

The study sample comprised 12 mother-infant dyads drawn from the population of all births by cesarean section in Santa Barbara Cottage Hospital between January and December of 2001. All dyads were invited to participate in the study and the sample was randomly drawn from those who responded from each of the four categories of cesarean birth as described below in order of an hypothesized increasing degree of stress/trauma.

1. Planned – with labor
2. Planned – non-labor
3. Emergency – with labor
4. Emergency – non-labor

Instrumentation:

- Independent variable: Type of Cesarean (see above)

- Dependent variables:

1. Child behaviors rated on ease to difficulty of negotiating three experiences falling into the category described as "**Transitions**" :

a. Being placed in/removed from car seats,

b. Falling asleep/waking,

c. Diaper change

2. Child behaviors rated on ease to difficulty of negotiating three experiences falling into the category described as "**Completions**"

a. Feeding,

b. Clean-up [of toys, etc.],

c. An age-appropriate play task such as fitting shapes through matching slots or similar

5-point scale used: Extremely Easy; Easy; Neither Easy Nor Difficult; Difficult; Extremely Difficult.

Mothers rated the level of ease or difficulty with which their children appeared to negotiate these six tasks/two categories of experience that were hypothesized to be affected by the experience of cesarean birth.

RESULTS

Maternal Demographics

Ethnicity:

Of the 12 dyads that comprised the study sample, seven were Caucasian, three were Hispanic and one was African-American.

Age range:

Three were in the age range 17-23 months, seven were aged between 26 and 34 months, and two were 37 and 43 months.

A correlation coefficient of + .91 was found between cesarean birth and ease or difficulty of task completions and of +.92 between cesarean birth and ease or difficulty of transitions, thus confirming the initial hypothesis and showing a positive linear relationship between the variables.

DISCUSSION

In this study we explored the possible relationship between cesarean birth and child behavior in transitions and task completions. The overall findings strongly support the hypothesis that cesarean birth affects the degree of difficulty with which children ages 2-3 years cope with transitions and task completions.

For the purposes of the study we hypothesized that planned cesarean births would

generally be less traumatic for the infant than emergency cesareans, and that a cesarean with labor would also generally be less traumatic than one without the initiation of labor. In our small sample this hypothesis appears to have been supported, however only a much larger study in which each condition could be isolated for analysis could verify these preliminary findings. A larger study would also likely benefit from studying behavior on similar tasks in samples of cesarean-born children of different ages, beginning with infancy and at intervals into adulthood, to discover whether such difficulties in tasks relating to the stages and sequencing of birth are enduring through the lifespan.

What this study was unable to demonstrate was whether the behavioral effects shown were related to birth by cesarean section *per se*, or to the anesthesia use that always accompanies such surgery. A future study might valuably examine the relationship between duration of anesthesia administration in cesarean birth and child behavior in similar situations as in the present study, controlling for the effects of cesarean birth with a comparison group of those born vaginally with the use of anesthesia.

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