

Natural Birth vs Caesarean section

What is the relation between C-section and children's health and development

INTRODUCTION

C-sections are becoming more common worldwide and the increasing rates of C-section are also associated with increased mortality rates and potential long-term implications for the children's health and development, that can last into adulthood. It is a major abdominal surgery, that carries additional risks, compared to a vaginal delivery and can result in complications and even death (Mayo Clinic, 2018). While there are some difficulties for the mother after this surgery, are there any difficulties, and long-term impacts of C-section for the child? Due to the increasing rates of elective C-sections in New Zealand, further research is needed on how safe it is to have a baby. through C-section, and compare the differences including physiological, psychological and behavioural development of children who are born by C-section to those born vaginally.

KEY FINDINGS

There are many advantages and disadvantages in both modes of delivery. Babies who are born through C-section are at greater risk of developing health related problems, and are associated with having impaired cognitive functioning and lower academic levels (Taras, & Potts-Datema, 2005). It is estimated that one in four babies not only will have breathing difficulties after C-section, but also have high chances of developing asthma later in life. C-section deliveries disrupt colonisation of the intestinal microbiota. Disrupting this process, can have a detrimental impact on the intestinal health, metabolism, affecting weight and consequently increasing the risk of developing obesity, Type 1 diabetes, and allergies with lifelong effects on the child's health (Gensollen, Iyer, Kasper, & Blumberg, 2016).

There is a strong suggestion that babies subconsciously remember their birth process and pain associated with it (Chamberlain, 1988). However, the emotional effect and consequences for the baby born by C-section are overlooked. A possible trauma can be caused by obstetrical intervention with outcomes such as bonding deficiency, feeding difficulty, and digestive issues (Mayo Clinic, 2018). During birth and in the first hour post-delivery important hormones are released that are responsible for enhancing mother and baby bond development. The disruption or delayed contact with the mother may have a negative effect on developing an attachment and dependency bond between mother and the baby (Guala et al., 2017).

Skin-to-skin contact, which is delayed during C-section, is essential for the baby straight after the birth and plays an important part in bonding. It calms the baby and the mother down, stabilizes breathing, temperature, heartbeat, blood glucose level, it also helps to reduce stress levels and crying in new borns (Feldman, Rosenthal, & Eidelman, 2014).

C-section delays breastfeeding process, and impacts breastfeeding initiation, milk supply, duration, and infant willingness to breastfeed (Ministry of Health, 2016). Behavioral differences of children who are born by C-section include: lack of good coping skills, boundary issues, low levels of concentration and focus, independency difficulties, hypersensitivity and hyper alertness (Ward, 1999).

RECOMMENDATIONS

- Guidelines development and monitoring the rates of Elective C-section
- Provision of education and information to expectant mothers
- Appropriate and accessible health care
- Promoting good diet and fitness levels during pregnancy

IMPLICATIONS FOR PRACTISE

- Longer stay in hospital
- Post-surgery complication and management
- Risk of developing health related issues for children
- Short and long-term management of those conditions.

CONCLUSION

The issue of natural birth vs C-section is multilayered and complex. Associated complications and implications of C-section to the child's health and development are evident. However, there is still not enough knowledge of long-term effects on the physical, psychological, and behavioural development of children born by C-section. Additional research is needed to empower women with knowledge about this topic, when it comes to making a choice between both options, all the facts should be presented and discussed, and as health care providers we should not only have the interest of the mother but the child as well. The process of giving birth naturally is something that was intended by nature and has a great logic behind it.

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Summary

The rationale for choosing a poster presentation, instead of submission, of my literature review as it is an effective and efficient way to attract attention and get people involved with my chosen message. It is also a great way to raise an awareness and start a debate. Poster presentation not only provides an opportunity to discuss the content with attendees, it also provides an opportunity to explain the concept in different ways. A poster is a concise, accessible way of representing research. It uses text and images to convey complex information, and to summarize large amount of data and ideas in a compact form (Rowe & Ilic , 2011). The advantages of a poster presentation is to harness a large audience, to disseminate information more quickly to its audience and create a lasting mental impression (Briggs, 2009). This is a simple way of providing information that can be potentially beneficial to healthcare providers and healthcare consumers, which is my target audience.

PECOT model:

I was able to refine my question of interest into a more specific one of “What is the relation between C-section and children’s health and development”. This search question was refined and formed on the basis of the PECOT model, which is often used as a guide for a research and consists of the categories: population, exposure, comparison, outcome, and time (Schneider, Whitehead, LoBiondo-Wood, & Haber, 2013).

Population that will be included in my literature review are children from 0-7 years of age, who were born by C-section, and what was the impact on their development, which will include their physical, psychological, and behavioural differences. Childhood and early adolescence are both important periods of time and any developmental issues or difficulties that these younger children may experience could potentially progress into their adolescence and adult lives with an overall significant impact.

Exposure in this literature review is children from 0-7 years of age, who were born via C-section, and will include peer reviewed articles from New Zealand and overseas, as well as longitudinal studies, which will provide not only more information about the impact of C-section on children’s development.

Comparison will be made with children aged 0-7 years old, who are born naturally in order to determine any physiological, psychological and behavioral differences, and the impact of C-section on children’s development and overall health.

Outcome of this literature review is aiming to provide more evidence about the relationship between C-section and possible related health issues in children who were born via C-section and the implications for the overall development of the child progressing into adulthood. Also it aims to provide more information to expectant mothers to enable them to make an informed decision about their birth plan.

Time will include from birth to 7 years of age as it is a crucial developmental period when it comes to the physical, psychological, behavioral aspects and any negative impact can last a life time (Schneider et al., 2013).

References:

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