

What are effective interventions to reduce the increase in elective cesarean section in low risk women

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Introduction

- According to Annals of Family Medicine, “The percentage of babies born by cesarean section increased in the United States from 4.5% in 1965 to 26.1% in 2002. Nearly 40% of cesarean sections are repeats.”
- According to Maternal Health Study Group of the Canadian Perinatal Surveillance System, “The overall severe maternal morbidity rate was 27.3 per 1000 deliveries (i.e., 27.3) for women in the planned cesarean delivery group, versus 9.0 among those in the planned vaginal delivery group.”
- A research study (Wiklund et al., 2007) surveyed Swedish primiparous women who requested a caesarean section (n=91) or experienced a vaginal birth (n=266). Data from 70 women demonstrated that fear of childbirth was the most common reason for the request.
- The research question will address the problem of complications related to elective c-section and establish interventions that will help reduce requests of c-sections without medical justifications through educational modalities.

Study Design/Sample

Title	Studies	Design	Samples/Demographics
Salient beliefs towards vaginal delivery in pregnant women: A qualitative study from Iran	To explore pregnant women's beliefs about the mode of delivery in order to provide some suggestions for future interventions to increase vaginal delivery.	This was a qualitative study framed by the Theory of Planned Behavior in Tehran, Iran in 2013. The data were collected using in-depth interviews and focus group discussions with pregnant women.	Participants were recruited from pregnant women attending public hospitals (n = 16) and the focus group discussions (n = 20). They were: 18–35 years old; over 32 weeks of gestational age; without complication during pregnancy; and without preexisting medical illness.
Risk of Uterine Rupture during Labor among women with a Prior C-Section	Risk of uterine rupture during labor among women with a prior c-section	Explorative-Descriptive Qualitative Research	Participants were primiparous women (n=20,095) who gave birth to live singleton infants by cesarean section in civilian hospitals in Washington from January 1, 1987, through December 31, 1996, and who delivered a second singleton child in Washington during the same period.
Vaginal Birth After Cesarean in California: Before and After a Change in Guidelines	To assess trends in VBAC in California and compares neonatal and maternal mortality rates among women attempting VBAC delivery or undergoing repeat cesarean delivery before and after this guideline revision.	Descriptive-Quantitative. The researchers took data from databases and analyzed the information	All women (n=3,545,518) who had singleton births in California between the years 1996-2002.
Safe Prevention of the Primary Cesarean Delivery	To understand the short-term and long-term tradeoffs between cesarean and vaginal delivery, as well as the safe and appropriate opportunities to prevent overuse of cesarean delivery, particularly primary cesarean delivery.	Qualitative Study	Study of the data and statistics from 1996 to 2011 representing rapid increase in cesarean rates

Search Strategy

The databases we used to search for the articles were CINAHL, ScienceDirect, and PubMed.

Database Searched	Date of Search	Search Terms	Years	Number of Sources Found
CINAHL Plus	9/10/2016	Cesarean Section	1951-2016	13,243
ScienceDirect	9/10/2016	Cesarean Delivery, Elective	Before 1997-2016	12,403
PubMed	9/10/2016	Cesarean Delivery, Elective	1954-2016	6,284

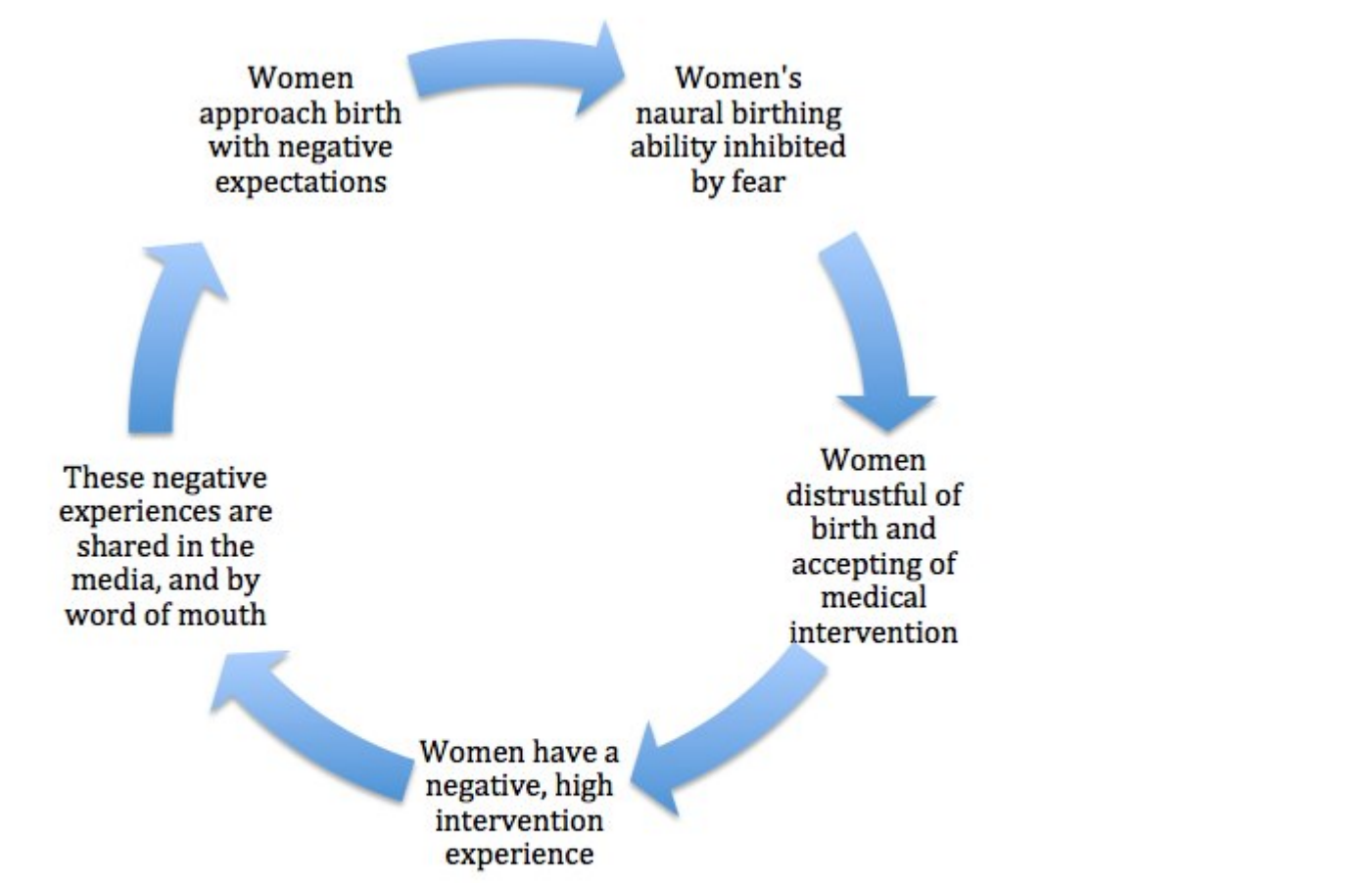
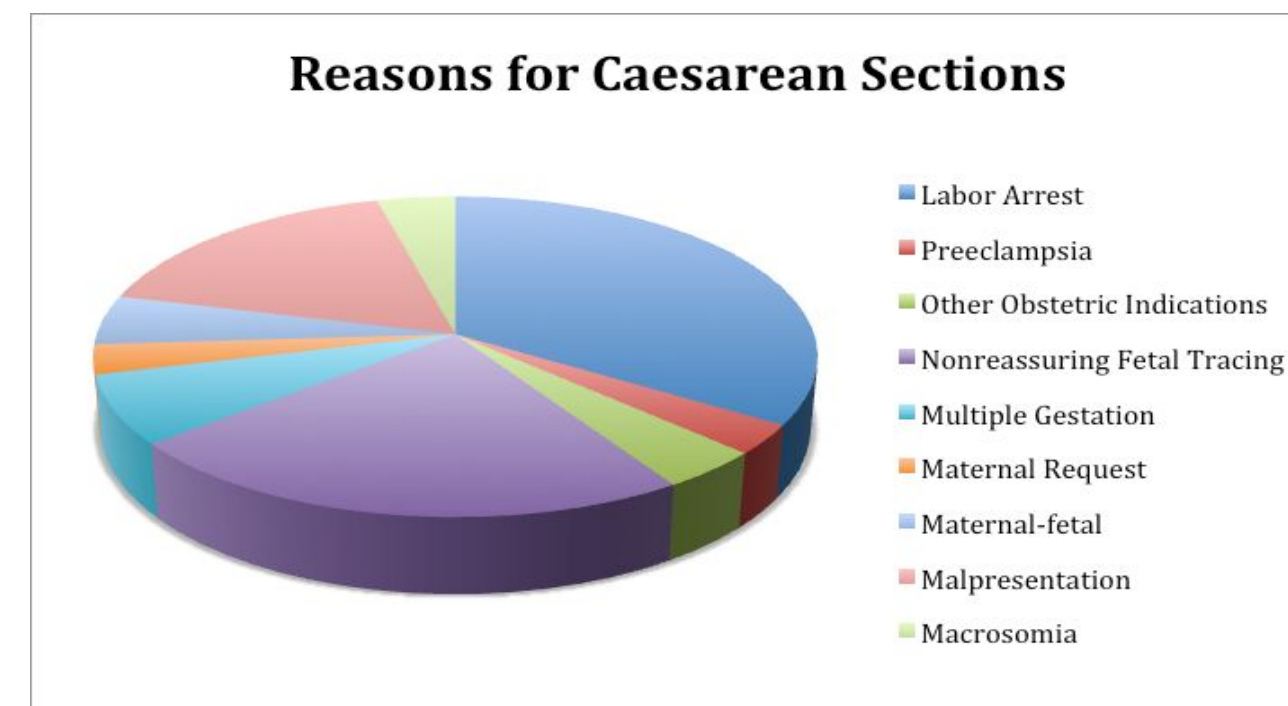
Result of refined searches

Database Searched	Date of Search	Search Terms and Strategy	Years	Number of Sources Found
CINAHL Plus	9/18/2016	Cesarean Section and maternal request or elective	1937-2016	11,422
ScienceDirect	10/5/2016	Safety and Prevention and Cesarean Section	Before 1997-2016	4,192
PubMed	10/14/2016	Risks and Uterine Rupture and Cesarean Delivery -abstract only -full text only	1957-2016	120
PubMed	10/18/2016	Vaginal Birth After Cesarean and United States -abstract only -full text only	1976-2016	445
PubMed	10/18/2016	Caesarean Request and Normal Pregnancy -abstract only	1986-2015	17
PubMed	11/05/2016	Beliefs and Vaginal Delivery -abstract only	1970-2016	550

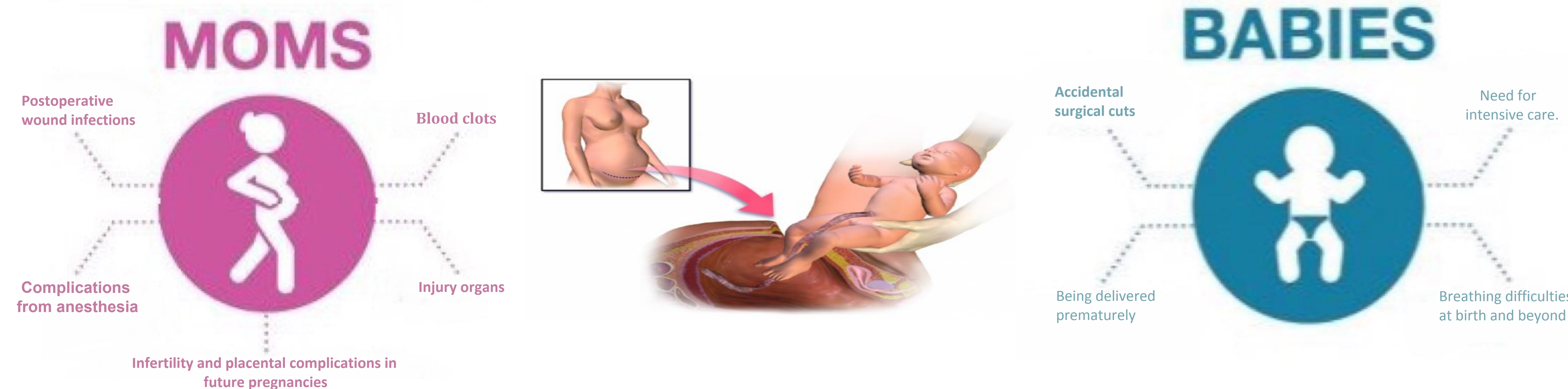
Findings

WHAT ARE THE REASONS FOR ELECTIVE C-SECTION?

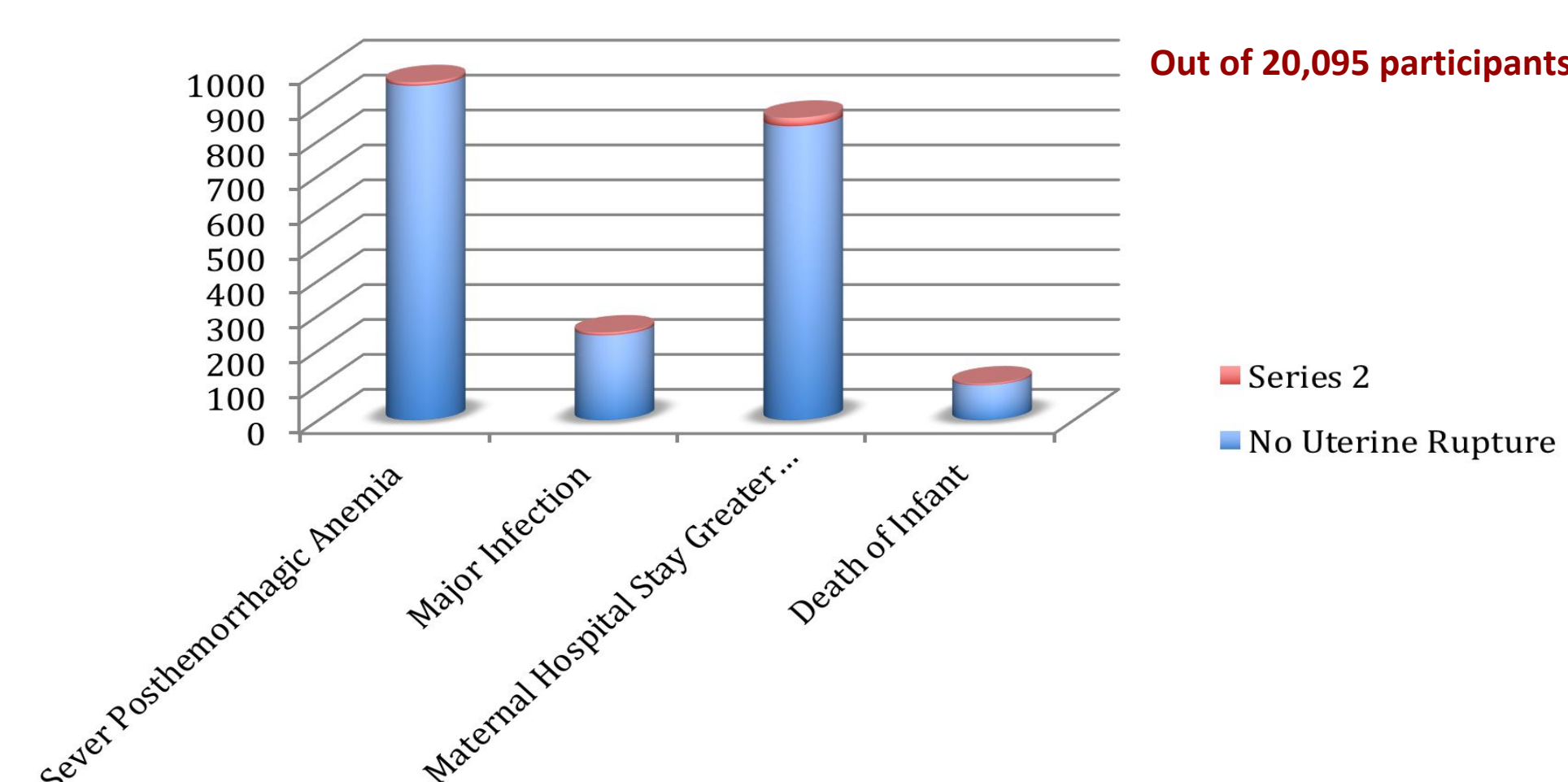
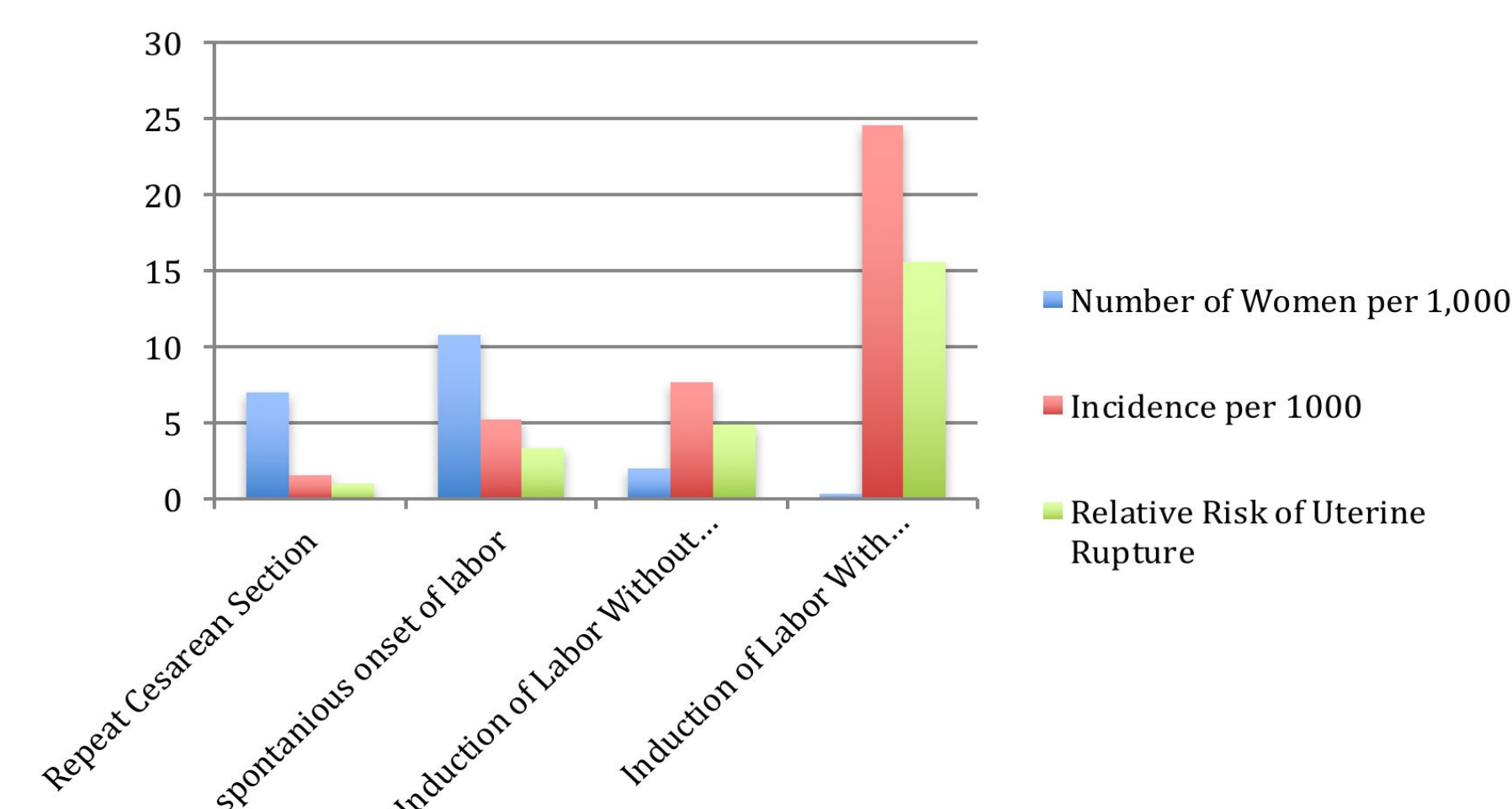
- Fear of the pain of childbirth
- fear the loss of control or safety
- fear of body being less attractive after childbirth
- believe that a caesarean section is the safer, more responsible choice



Cesarean Section Risks



How to Reduce Elective Cesarean Section?



Summary/ Implications for Practice

Summary

- In 2011, one in three women who gave birth in the United States by cesarean delivery. Rapid decrease in cesarean birth rates from 1996 to 2011 without clear evidence of concomitant increase in maternal or neonatal morbidity or mortality raises significant concern that cesarean delivery is overused and clinical intervention are needed to avoid further complications.

Implications

- Education/Risks and benefits:** For certain clinical conditions cesarean delivery is firmly established as the safest route of delivery. However, for most pregnancies cesarean delivery appears to pose greater risk of maternal morbidity and mortality than vaginal delivery.
 - prenatal care educational programs to address concerns
 - information to be tailored to their individual clinical needs
 - assist women to articulate their concerns and develop strategies to promote confidence and competence in childbirth.
 - multidisciplinary research needs to examine women's childbirth beliefs and decisions within the broader sociological context

Health Policy changes(National/Regional)

- individuals, organizations, and governing bodies should work to ensure that research is conducted to provide a better knowledge base to encourage policy changes that safely lower the rate of primary cesarean delivery

Continuous Labor and Delivery Support

- Increasing women's access to non-medical interventions during labor, such as continuous labor and delivery support to reduce cesarean birth rates.
- one-on-one support during labor and delivery was associated with improved patient satisfaction and a statistically significant reduction in the rate of cesarean delivery
- health care providers should address women's psychological needs during pregnancy and give continuous support during childbirth.

Conclusion/ Further Study

Based on the research we have found effective interventions to reduce the increase in elective cesarean sections for low risk women. For most pregnancies cesarean sections pose a much greater risk for maternal morbidity and mortality than vaginal delivery.

The interventions that we have found, address maternal fears and preconceived thoughts about cesarean sections. There needs to be a greater push for prenatal educational programs that address maternal fears of childbirth, pain, safety, and loss of control.

Continuous labor and delivery support has been associated with a reduction in cesarean deliveries and improved patient satisfaction. Organizations and governing bodies need to ensure research is conducted to provide knowledge and promote policy changes. As an interdisciplinary team we need to encourage women to articulate their concerns, develop strategies to promote confidence in the child birthing process, and examine the woman's childbirth beliefs and decisions within a broader sociological context.

Further Research:

- We also recommend a study of neonatal mortality and morbidity associated with very low birth weight for women with previous cesarean sections that accounts for precipitous or unplanned VBAC deliveries.
- Organizations and governing bodies should work to ensure that research is conducted to provide knowledge to encourage policy changes that safely lower the rate of elective cesarean deliveries.

Acknowledgements/Contacts

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