Center for International Reproductive Health Training (CIRHT) Journal Article Writing Series

Module 3 Results Section

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Overview of module

- Elements of results with examples
  - First part describing study population
  - Second part answer your study questions
- Consistent across sections
  - with research questions
  - with methods
- Tips

“First Part”

Who is in study population.

- Table 1
- Text

GYNECOLOGY

Longitudinal study of quantitative changes in pelvic organ support among parous women

Victoria L. Handa, MD, MHS; Joan L. Blomquist, MD; Jennifer Roem, MS; Alvaro Muñoz, PhD

TABLE 1
Characteristics of the study population at the first study visit (ie, study entry)

Variable	Cesarean only (n = 617)	At least 1 vaginal birth (n = 607)
Age at first delivery, y		
<30	37% (230)	38% (231)
30 to <35	35% (212)	36% (216)
≥35	28% (175)	26% (160)
Primary race		
White	77% (477)	84% (508)
Black	17% (106)	12% (72)
Asian	2% (13)	3% (18)
Other	4% (21)	1% (9)
Deliveries at study entry, n		
1	31% (194)	24% (144)
2	55% (338)	58% (355)
≥3	14% (85)	18% (108)
Years from first delivery at study entry	7.1 ± 1.7	6.9 ± 1.7
Body mass index at study entry, kg/m^2		
< 25 kg/m^2	41% (256)	53% (325)
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2.5–3 cm	40% (248)	42% (257)
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Follow-up visits, n		
2–3	19% (116)	19% (116)
4–5	19% (117)	25% (154)
6–7	33% (204)	33% (201)
8–9	29% (180)	23% (136)
Longitudinal follow-up, y	5.3 ± 2.1	5.0 ± 2.0
Person-visits	3659	3396

Values represent mean ± SD or percentage (n).

Handa et al. Longitudinal changes in pelvic organ support. Am J Obstet Gynecol 2018.

Handa et al. Am J Obstet Gynecol 2018;218:320.e1-7.

Original Research

GYNECOLOGY

Longitudinal study of quantita… support among parous wome…

Victoria L. Handa, MD, MHS; Joan L. Blomquist, MD

BACKGROUND: Pelvic organ prolapse is more comm… parous (vs nulliparous) women and also more common af… (vs cesarean) birth. However, very little is known about how… affects the course and progression of the genital hiatus across … life span.

OBJECTIVE: The objective of the study was to investigate … tudinal, quantitative changes in pelvic organ support after … focusing on the impact of vaginal vs cesarean delivery.

STUDY DESIGN: This was a prospective longitudinal coho… which parous women were recruited 5–10 years from fir… and followed up annually. Using data from annual pelvic … lapse quantification examinations, we considered changes … support at the anterior vaginal wall (point Ba), the vaginal … C), and the posterior wall (point Bp). In univariate and m… models, we compared pelvic organ support between wome… delivered at least 1 child vaginally vs those delivered excl… cesarean. Other covariates considered included race, age … livery, and the size of the genital hiatus. For models of sup…

In the first decade after childbirth, pelvic organ prolapse is strongly associated with vaginal (vs cesarean) birth.[1] Specifically, the odds of uterovaginal prolapse to or beyond the hymen are 5 times higher among women with a history of vaginal birth compared with women who have delivered by cesarean.[1]

However, very little is known about how childbirth affects the course and progression of pelvic organ prolapse across a woman's life span. Prior studies have suggested that prolapse may progress in some women but regress in others.[2,3] Progression of prolapse is an important concept: the mildest forms of prolapse have no impact on health or quality of life, while more severe cases

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https://doi.org/10.1016/j.ajog.2017.12.214

Related editorial, page 267

TABLE 1
Characteristics of the stud…

Variable
Age at first delivery, y
<30

FIGURE
Rates of changes in position of each POPQ point

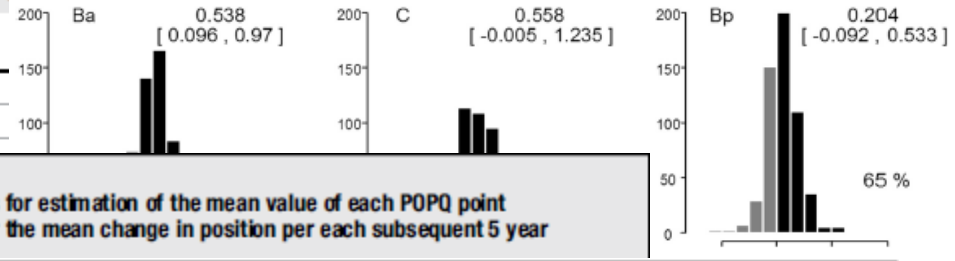

TABLE 2
Mixed univariable (unadjusted) regression models for estimation of the mean value of each POPQ point (Ba, C and Bp), 5 years from first delivery, and for the mean change in position per each subsequent 5 year interval (n = 7055 woman-visits)

Covariate
Vaginal birth
No
Yes
Genital hiatus, cm
≤2
2.5–3
≥3.5
Vaginal apex (C)
≤−7 cm
−6.5 to −5.5 cm
≥−5 cm
Age at first delivery, y
<30
30 to <35
≥ 35
Body mass index, kg/m^2
<25
25 to <30
≥30

NA, not applicable; NS, not statistically …

Handa et al. Longitudinal changes in …

TABLE 3
Mixed multivariable (adjusted) regression models for estimation of the mean value of each POPQ point (Ba, C, and Bp) 5 years from first delivery and for the mean change in position, per each subsequent 5 year interval (n = 7055 woman-visits)

	Ba		C		Bp	
Covariate	Mean value (*P* value)	Mean change (*P* value)	Mean value (*P* value)	Mean change (*P* value)	Mean value (*P* value)	Mean change (*P* value)
Vaginal birth						
No	−2.40 (ref)	0.38 (ref)	−6.71 (ref)	0.42 (ref)	−2.90 (ref)	(not included)
Yes	−1.99 (< .001)	0.24 (< .001)	−6.45 (.001)	0.61 (.003)	−2.62 (< .001)	
Genital hiatus, cm						
≤2	−2.40 (ref)	0.38 (ref)	−6.71 (ref)	0.42 (ref)	−2.90 (ref)	0.23 (ref)
2.5–3	−2.06 (< .001)	0.47 (.004)	−6.9 (< .001)	0.58 (.001)	−2.73 (< .001)	0.31 (.001)
≥3.5	−1.65 (< .001)	0.47 (.033)	−6.85 (NS)	0.61 (.003)	−2.51 (< .001)	0.39 (< .001)
Vaginal apex (C), cm						
≤−7	−2.40 (ref)	(not included)	(NA)	(NA)	−2.90 (ref)	0.23 (ref)
−6.5 to −5.5	−2.11 (< .001)				−2.73 (< .001)	0.18 (NS)
≥−5	−1.88 (< .001)				−2.54 (< .001)	0.16 (.011)
Age at first delivery, y						
<30	(not included)	(not included)	−6.71 (ref)	(not included)	−2.90 (ref)	(not included)
30 to <35			−6.61 (NS)		−2.79 (< .001)	
≥35			−6.50 (.003)		−2.78 (< .001)	
Body mass index, kg/m^2						
<25	(not included)	(not included)	(not included)	(not included)	−2.90 (ref)	0.23 (ref)
25 to <30					−2.84 (NS)	0.17 (.039)
≥30					−2.78 (.001)	0.11 (< .001)

Each model includes covariates remaining statistically significant in the multivariable model. Some variables were not included in the multivariable models because of lack of significant association in univariable models.

NA, not applicable; *NS*, not statistically significant; *ref*, reference.

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Rows- exposures

Handa et al. Am J Obstet Gynecol 2018;218:320.e1-7.

Airway changes following labor and delivery in preeclamptic parturients: a prospective case control study

P. Ahuja,[a] D. Jain,[a] N. Bhardwaj,[a] K. Jain,[a] S. Gainder,[b] M. Kang[c]

Results

Of 56 women assessed for eligibility, six were removed due to a protocol violation. Two patients from each group did not co-operate when attempting the Mallampati assessment, while airway sonography could not be performed for technical reasons in two parturients in the preeclamptic group. Data from 50 parturients were analyzed (see Fig. 2).

Ahuja et al. International Journal of Obstetric Anesthesia (2018) 33, 17–22

“Second Part”

- Answering study question with text, tables and figures
- Suggestions for writing results: focus on answering research question rather than statistical tests.

Factors associated with low-lying intrauterine devices: a cross-sectional ultrasound study in a cohort of African-American women☆,☆☆

Malana Moshesh [a,*], Tina Saldana [b], Elizabeth Deans [a], Tracy Cooper [c], Donna Baird [d]

1

3.2 Low-lying IUDs and dysmenorrhea

Women with a low-lying IUD were more likely to report a "big problem" with dysmenorrhea in the past 12 months than women with a normally-positioned IUD (OR 3.2 95% CI 1.07-9.54) (Table 3). Although proportionately more women with a low-lying IUD reported dysmenorrhea that interfered with activities of daily living, the association was not statistically significant (Table 3). We found that women with a low-lying IUD were not more likely than those with normally-positioned IUDs to report choosing the IUD to alleviate menstrual pain symptoms (7.1% versus 8.6%, P=0.79, based on chi-square test), suggesting that the increased dysmenorrhea in the group with low-lying IUDs was not due to problems with dysmenorrhea prior to IUD insertion.

Moshesh,et al. Contraception. Accepted 2018

Factors associated with low-lying intrauterine devices: a cross-sectional ultrasound study in a cohort of African-American women☆,☆☆

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1

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- Focus is association not statistical test
- Direction of association
- Strong lead sentence

"The odds ratio for IUD and dysmenorrhea was 3.2

"The association for IUD and dysmenorrhea was significant"

✓ When XX increases, XX also increases.

Moshesh,et al. Contraception. Accepted 2018

GYNECOLOGY

Missed opportunities for HPV immunization among young adult women

Carlos R. Oliveira, MD; Robert M. Rock, BA; Eugene D. Shapiro, MD; Xiao Xu, PhD; Lisbet Lundsberg, PhD; Liye B. Zhang, BA; Aileen Gariepy, MD; Jessica L. Illuzzi, MD, MHS; Sangini S. Sheth, MD, MPH

0.07–0.87]; $P = .03$). Associations between missed opportunities and age, Hispanic ethnicity, Spanish language, or parity were not statistically significant.

Oliveira et al. Am J Obstet Gynecol 2018;218:326.e1-7.

Does the addition of active body warming to in-line intravenous fluid warming prevent maternal hypothermia during elective caesarean section? A randomised controlled trial

R. Chebbout,[a] R.S. Newton,[b] M. Walters,[b] I.J. Wrench,[a,b] M. Woolnough[b]
[a]*The Medical School, University of Sheffield, Sheffield, UK*
[b]*Sheffield Teaching Hospitals NHS Foundation Trust, Jessop Wing, Sheffield, UK*

ABSTRACT

Introduction: Inadvertent perioperative hypothermia occurs frequently during elective caesarean section but perioperative active body warming is not widely used. There is a paucity of evidence of its use in the obstetric population, and no applicable guidelines. We set out to identify a superior active warming method for preventing inadvertent perioperative hypothermia.

Methods: Following ethical approval, 132 women presenting for uncomplicated elective caesarean section under spinal anaesthesia were recruited. All participants received in-line intravenous fluid warming and were randomised to one of three parallel groups: no active body warming; forced air warming; and conduction mattress warming. The primary outcome was the difference in mean core temperature, measured on admission to the recovery room, between study groups. Core temperature and thermal comfort were measured perioperatively at 15-min intervals. Estimated blood loss, haemoglobin change, length of hospital stay and neonatal core temperature were also recorded.

Results: One-hundred-and-thirty-one women completed the study. There was no significant difference in mean core temperature on admission to the recovery room (36.6°C vs. 36.6°C vs. 36.6°C, η^2=0.005, P=0.74). Maternal hypothermia was prevented in all groups with only 0.3% hypothermic at any of the temperature measurements (3/1016). There was no difference in mean neonatal core temperature (36.3°C vs. 36.3°C vs. 36.3°C, η^2=0.003, P=0.82); however, 59.4% (76/128) of all neonates were hypothermic.

Conclusion: In-line intravenous fluid warming is sufficient to prevent maternal hypothermia and maintain core temperature. The addition of active body warming conferred no added benefit.

Chebbout et al. International Journal of Obstetric Anesthesia (2017) 31, 37–44

Tables and Figures

- Clear message
- Complement text

Clear message.

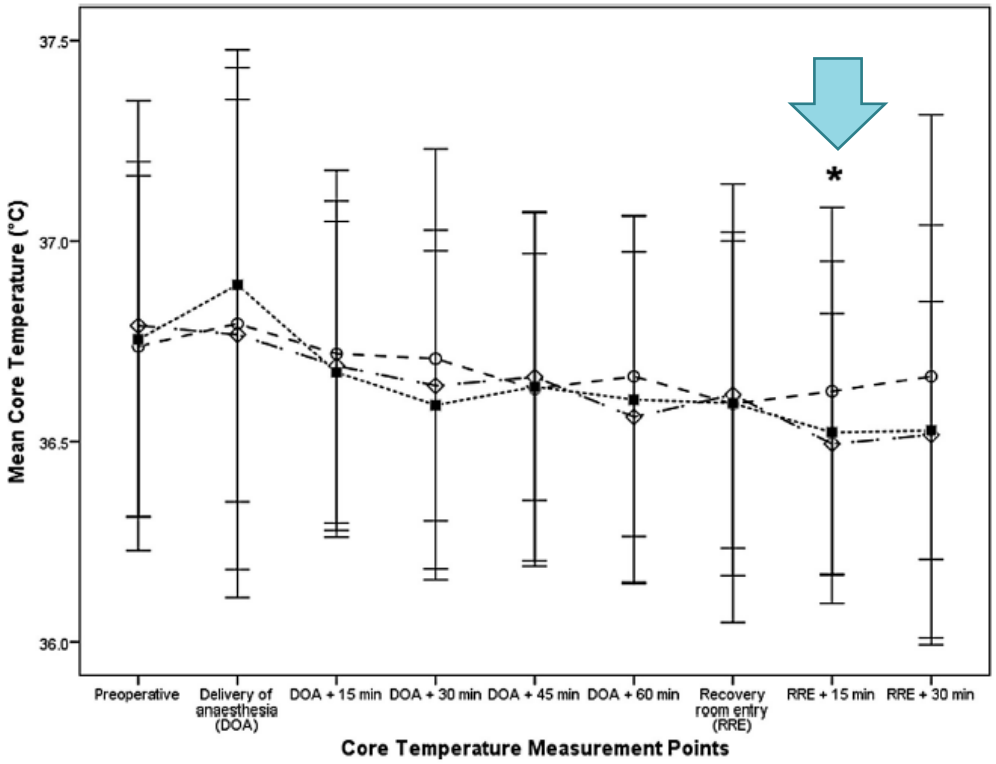
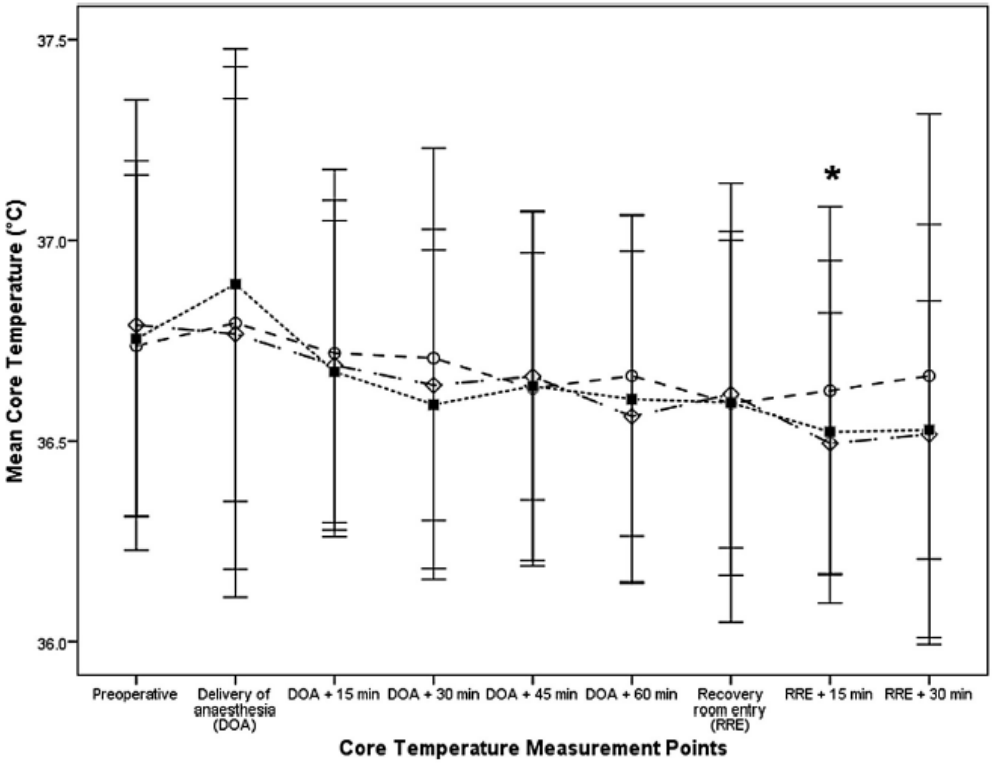


Fig. 2 Multiple line graph of mean core temperature at each measurement point by study group (standard care: –-◇-–, forced air warming: –○–, and conduction mattress warming: --■--). Error bars are ±2 SD from mean. *Significant difference between study groups

Fig 2. Multiple line graph of mean core temperature at each measurement point by study group (standard care: –-e-–, forced air warming: —, and conduction mattress warming: - -j- -). Error bars are ±2 SD from mean. *Significant difference between study groups

Chebbout et al. International Journal of Obstetric Anesthesia (2017) 31, 37–44



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Maternal T_c was maintained throughout the study for all study groups (Fig. 2). There was no statistically significant difference in maternal T_c on admission to the recovery room (36.6 ± 0.2C vs. 36.6 ± 0.2C vs. 36.6 ± 0.2C, g_2=0.005, P=0.74), or at any other measurements, except 15-min after entry into the recovery room.

Chebbout et al. International Journal of Obstetric Anesthesia (2017) 31, 37–44

Consistency check

- Make sure research question is answered by your results
- Make sure the results reflect what is described in the methods

Summary

- Describe sample in table and text without repeating
- Focus on answering research question rather than statistical tests.
- Each figures and table should have a clear message
- Tables and figures should be understandable on their own, without reading the text
- See additional tips on preparing your results section in the "Tips For Preparing Your Results Section" handout, provided as a companion to this module.