

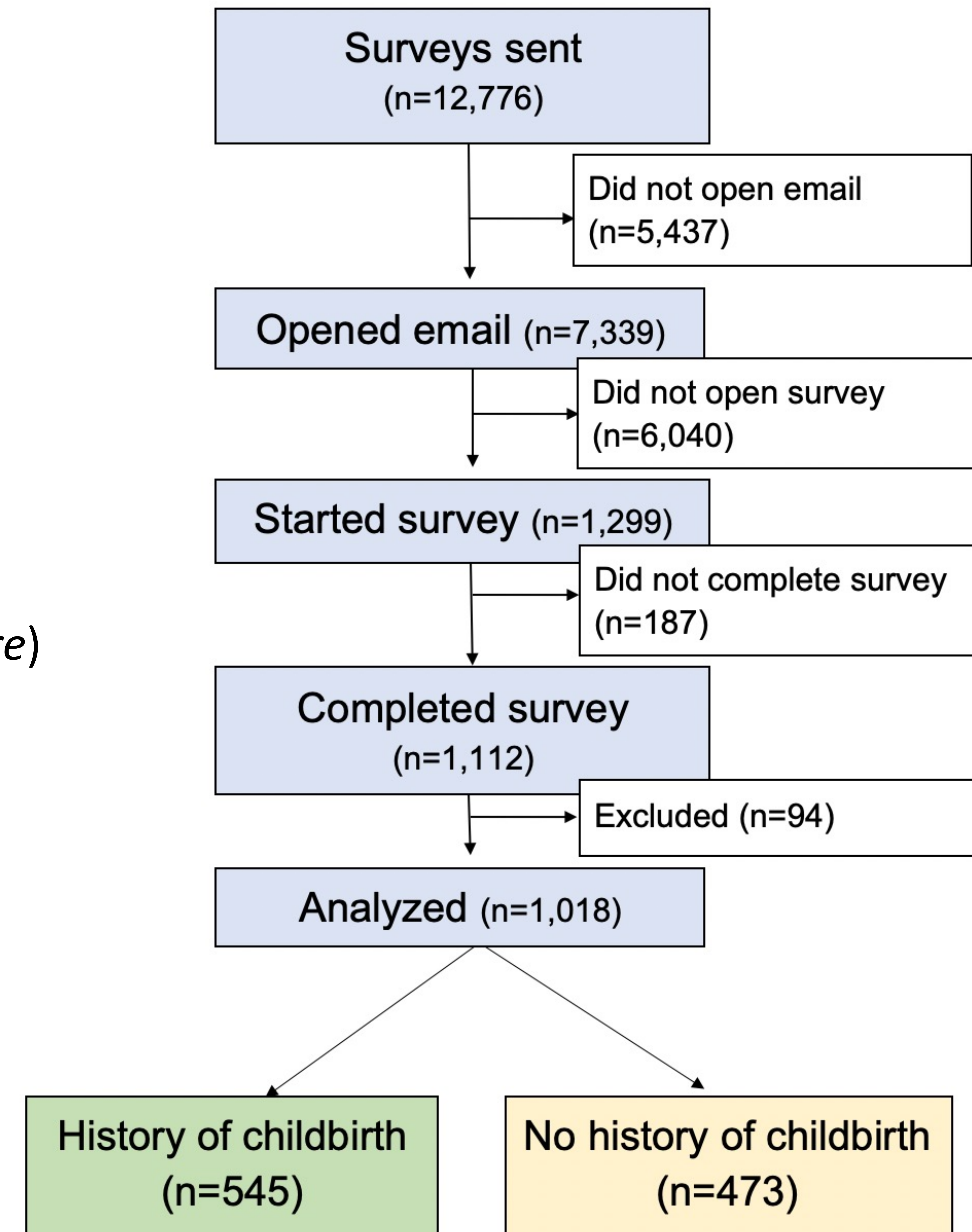
Association between headache and childbirth in a chronic pain population: A cross-sectional study including 1018 patients

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- Headache is common in the postpartum period
- Older data (Head-HUNT-2 data collected in Norway in 1990s)
 - Parous women have more headaches than non-parous women even years later
- Emerging data suggests that intrapartum events may be linked to new chronic headache disorders



- **Study design:**
 - Single-center, observational study
 - Email questionnaire detailing demographic, obstetric, and pain features
 - Sent to 12,000+ women seen in chronic pain clinic
- **Hypothesis:** Childbirth is a risk factor for chronic headaches severe enough to warrant care in a pain management clinic.
- **Methods:**
 - Primary outcome: Association between childbirth (*exposure*) and headache prevalence (*outcome*)
 - Analyzed by multiple Poisson regression
 - Adjusted for age, weight, employment, race and ethnicity, and income.
 - Secondary: compare women with onset of headache problems prior to childbirth versus after giving birth.



	No chronic headache (n=101)	Headache onset pre-delivery (n=243)	Headache onset post-delivery (n=190)	p-value
Age	59.9 (14.3)	52.0 (12.0)	56.1 (12.0)	<0.001
Weight	164.1 (40.4)	174.8 (44.2)	166.8 (40.8)	0.049
Employment				0.001
Working full time	27 (26.8)	83 (34.2)	41 (21.6)	
Working part time	18 (17.8)	33 (13.6)	28 (14.7)	
Full time homemaker	9 (8.9)	26 (10.7)	27 (14.2)	
Retired	38 (37.6)	53 (21.8)	53 (27.9)	
Prefer not to state or other	9 (8.9)	48 (19.7)	41 (21.6)	
Race				0.943
Income				0.018
Less than 20,000	4 (4.0)	19 (7.8)	24 (12.7)	
20,000 to 34,999	9 (8.9)	24 (9.9)	11 (5.8)	
35,000 to 149,999	47 (46.5)	78 (32.1)	77 (40.5)	
150,000 to 199,999	8 (7.9)	40 (16.5)	20 (10.5)	
Greater than 200,000	19 (18.8)	46 (18.9)	28 (14.7)	
# of children raised				0.014
0	4 (4.0)	7 (2.9)	10 (5.3)	
1	25 (24.7)	65 (26.7)	31 (16.3)	
2	41 (40.6)	99 (40.7)	62 (32.6)	
3	21 (20.8)	39 (16.1)	50 (26.3)	
More than 3	10 (9.9)	33 (13.6)	37 (19.5)	
Migraine	0	177 (72.8)	119 (62.6)	<0.001

Results:

Prevalence of chronic headache:

- 81.5% (444 out of 545) in women who had given birth
- 76.5% (362 out of 473) in women who had not
- Adjusted PR 1.14 (95% CI 1.06-1.23, $p < 0.001$)

Women whose headaches began after childbirth (n=190) differed from those whose headaches began prior to giving birth (n=243):

- lower income
- less employment
- greater headache severity
- less prevalent migraine phenotype

Conclusions:

- Childbirth is a risk factor for chronic headaches.
- Need more studies to get at mechanism and causality.

