Pregnancy outcomes

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Pregnancy outcomes in women with intellectual disability. A cohort study using linked Swedish population-based registers (IDcare)

The presentation will be available at
http://www.lupop.lu.se/IDcare

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What is already known?

- Women with intellectual disabilities have increased risk of
  - pregnancy-related disorders
    - hypertensive disorders, gestational diabetes, pre-eclampsia, urinary tract infections
  - pregnancy complications
    - hemorrhage, placental abruption, venous thromboembolism, threatening pre-term labor, placenta previa
  - delivery and postpartum complications
    - emergency visits, hospital admissions, preterm birth, caesarean delivery, long postnatal stays
- Previous research from Sweden (births 1999-2007) resulted in changes in maternal care – did it have any effect?

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Do pregnancy outcomes among pregnant women with intellectual disability (still) differ from those among pregnant women in the general population?

Maternity care in Sweden

- Free of charge
- Mainly done by midwives
- Physician consulted only when problem arises
- National monitoring program

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Maternity program in Skåne

Each visit throughout pregnancy

Weight

Blood pressure

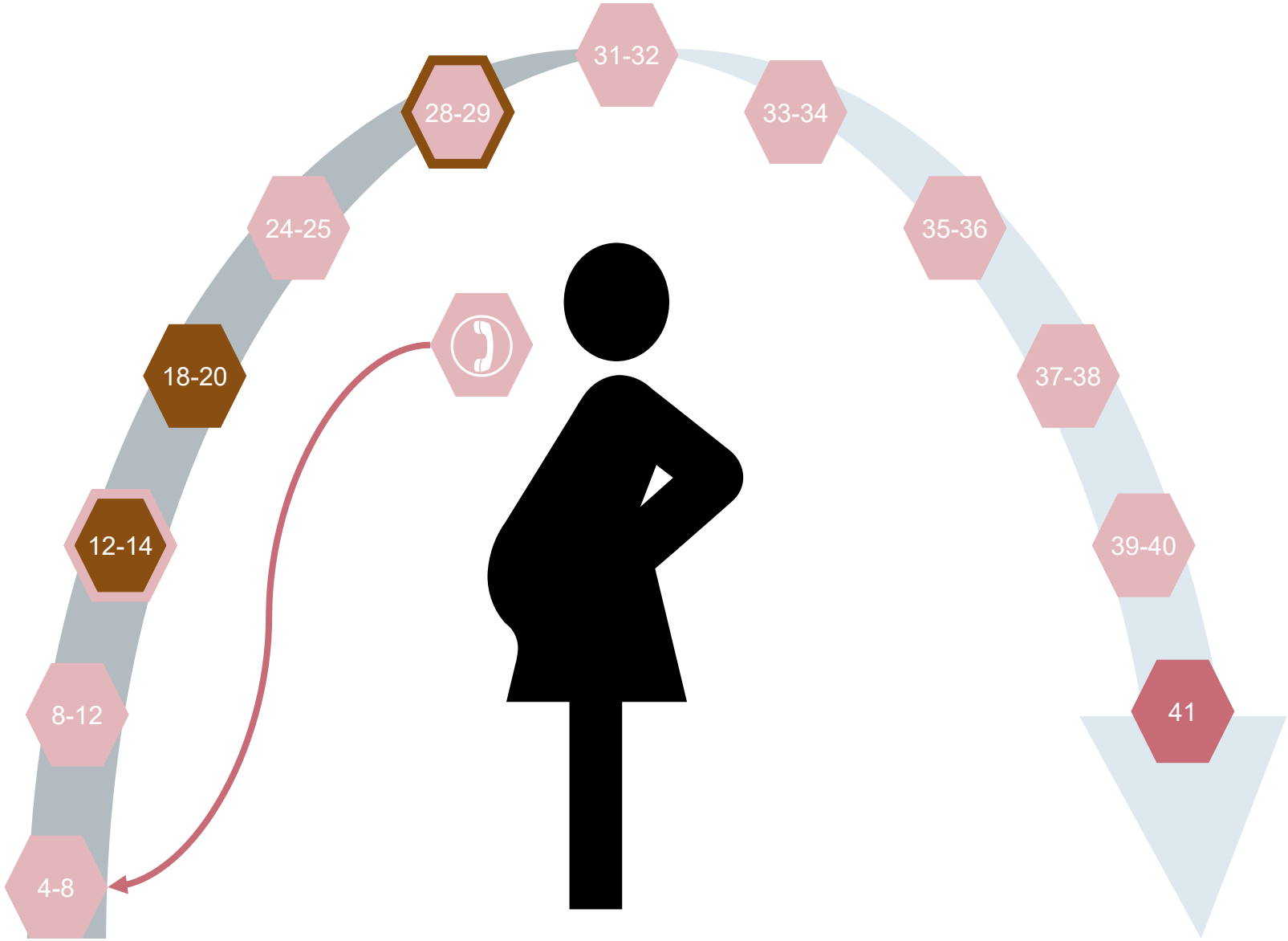
Urine sample (protein)

First visit

Medical and reproductive history

Sociodemographic factors

Blood test: Rubella, HIV, hepatitis B, syphilis, blood group



Each visit late pregnancy

Fetal heartbeat

Symphysis-fundus measurement

Fetal position

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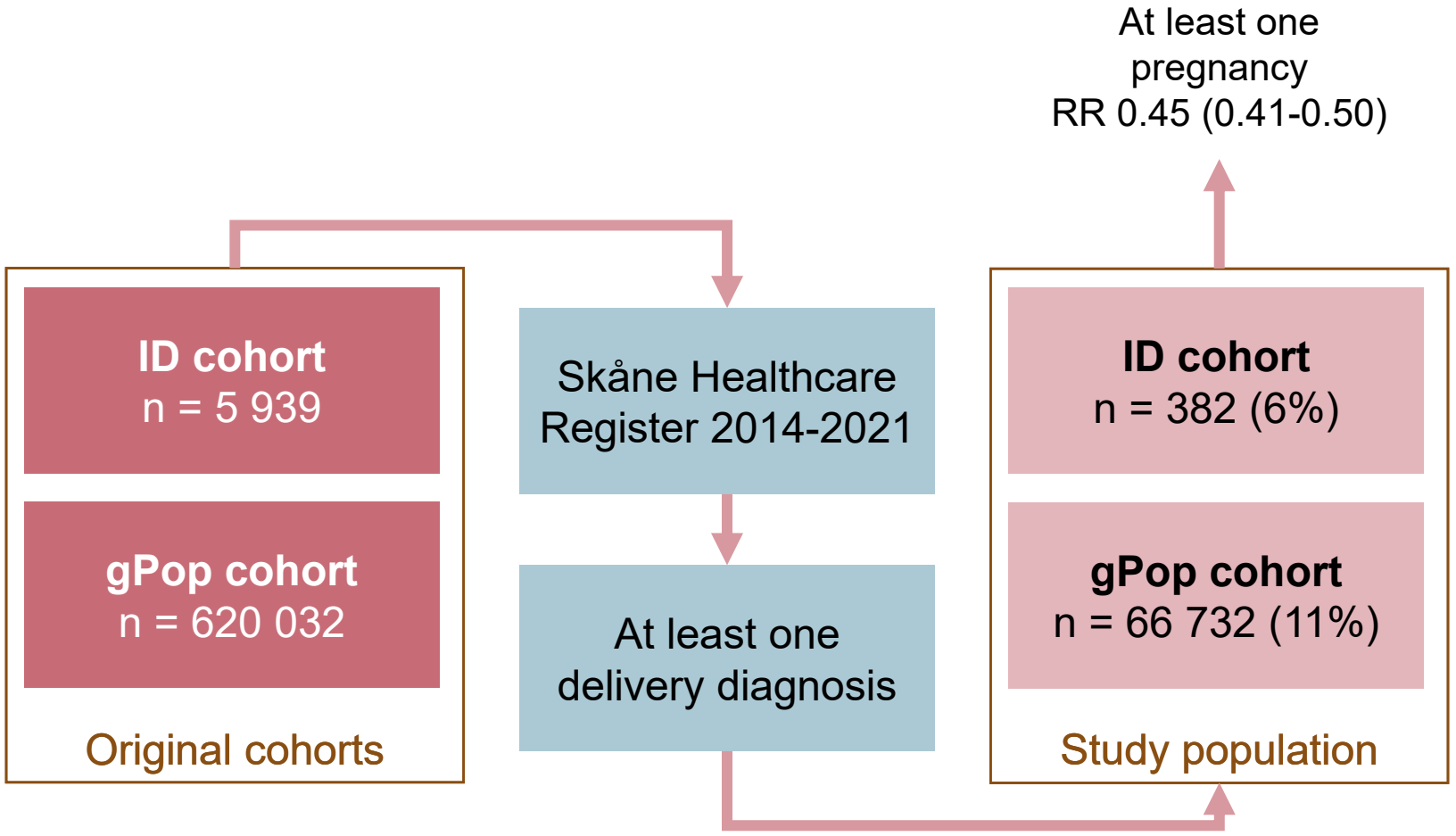
Study population



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Outcomes

Mode of delivery	Maternal disorders	Maternal care	Delivery	Other contacts
• O80-O84 Delivery	• O10-O16: Oedema, proteinuria, and hypertensive disorders in pregnancy, childbirth, and the puerperium • O20-O29: Other maternal disorders predominantly related to pregnancy	• O30-O48 Maternal care related to the fetus and amniotic cavity and possible delivery problems	• O60-O75 Complications of labor and delivery	• Z32 Pregnancy examination and test • Z33 Pregnant state, incidental • Z34 Supervision of normal pregnancy • Z35 Supervision of high-risk pregnancy[1] • Z36 Antenatal screening • Z39 Postpartum care and examination

[1] *History of infertility or abortive outcome, other poor reproductive or obstetric history, insufficient antenatal care, pregnancy with grand multiparity, elderly or very young primigravida, or social problems*

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Data management

- Only first delivery
- 40w before ⇨ 1w after
- n ≥ 5
- Only singleton pregnancies
- Adjusted for age at inclusion and age at delivery

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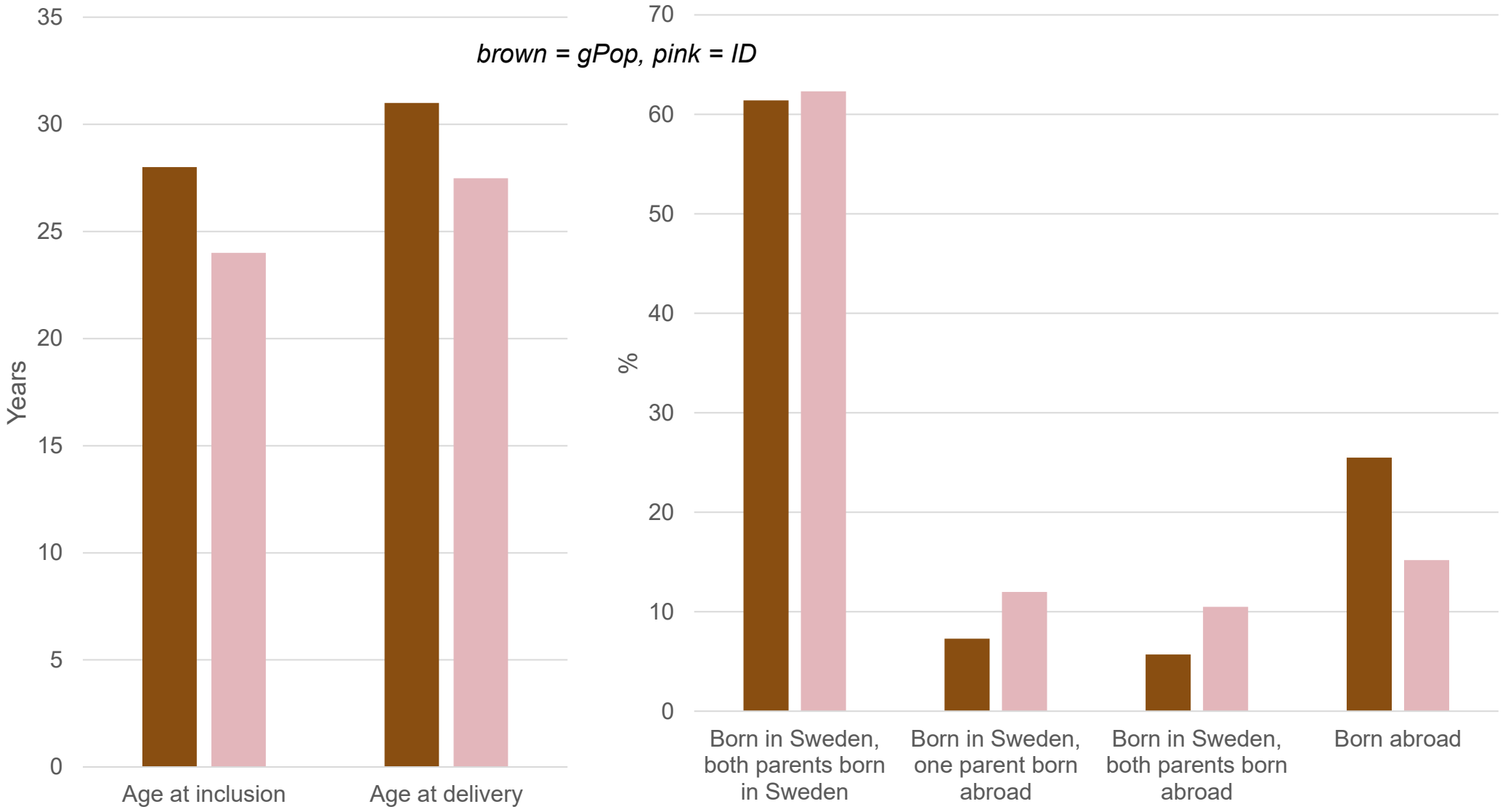
Background data



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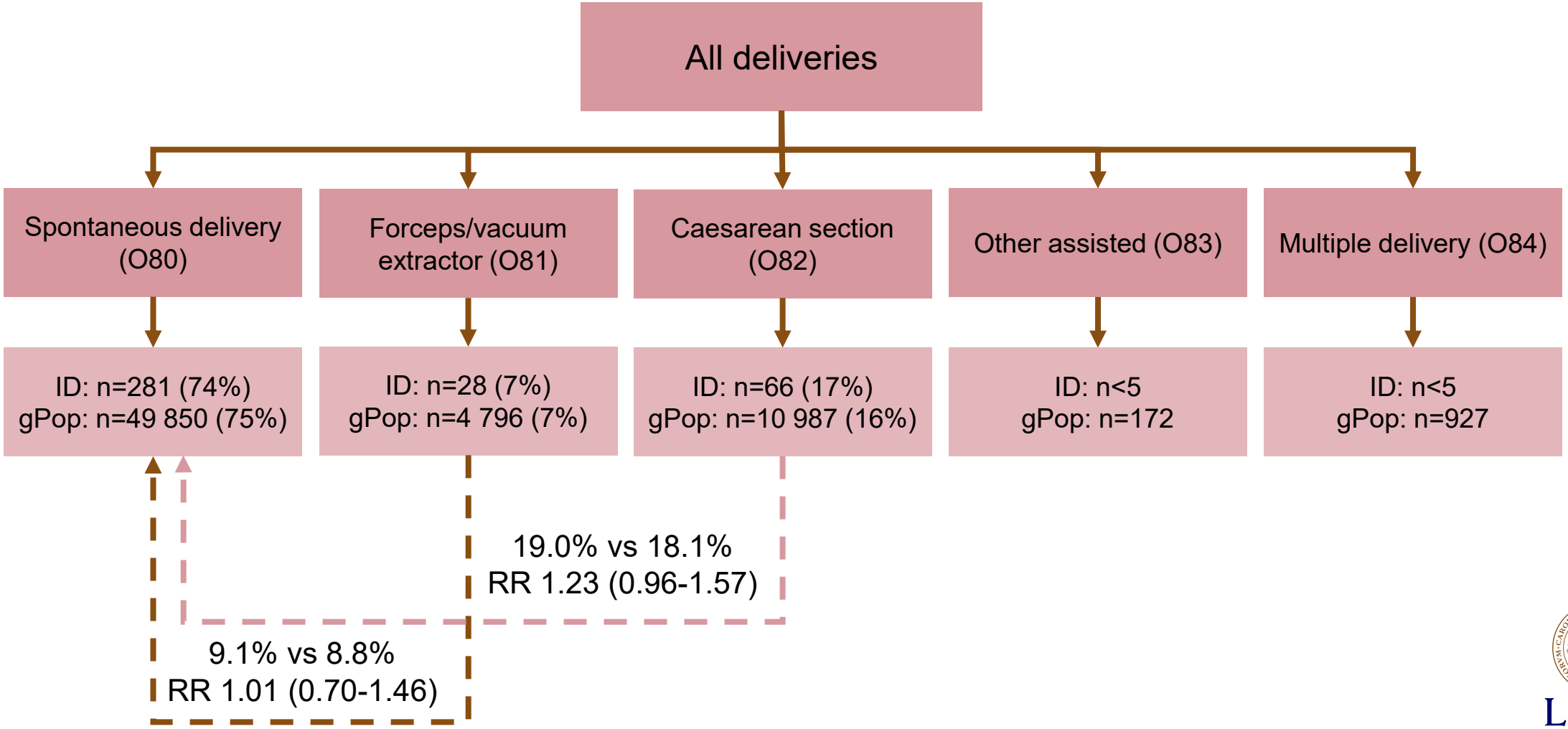
Mode of delivery



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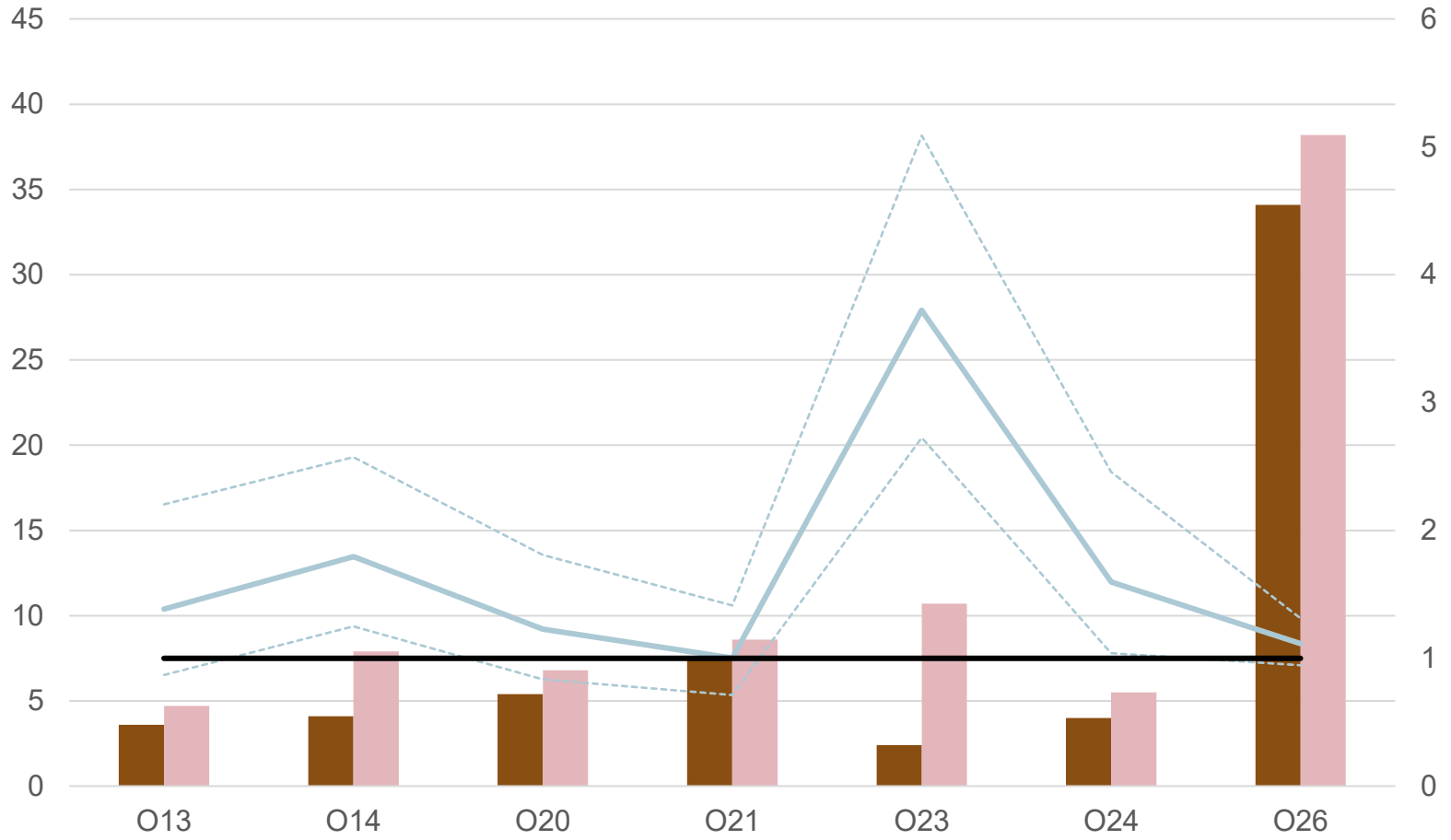
Maternal disorders



brown = gPop, pink = ID

O13: Gestational hypertension

O14: Pre-eclampsia

O20: Hemorrhage in early pregnancy

O21: Excessive vomiting

O23: Infections of genitourinary tract

O24: Diabetes mellitus in pregnancy

O26: Other conditions

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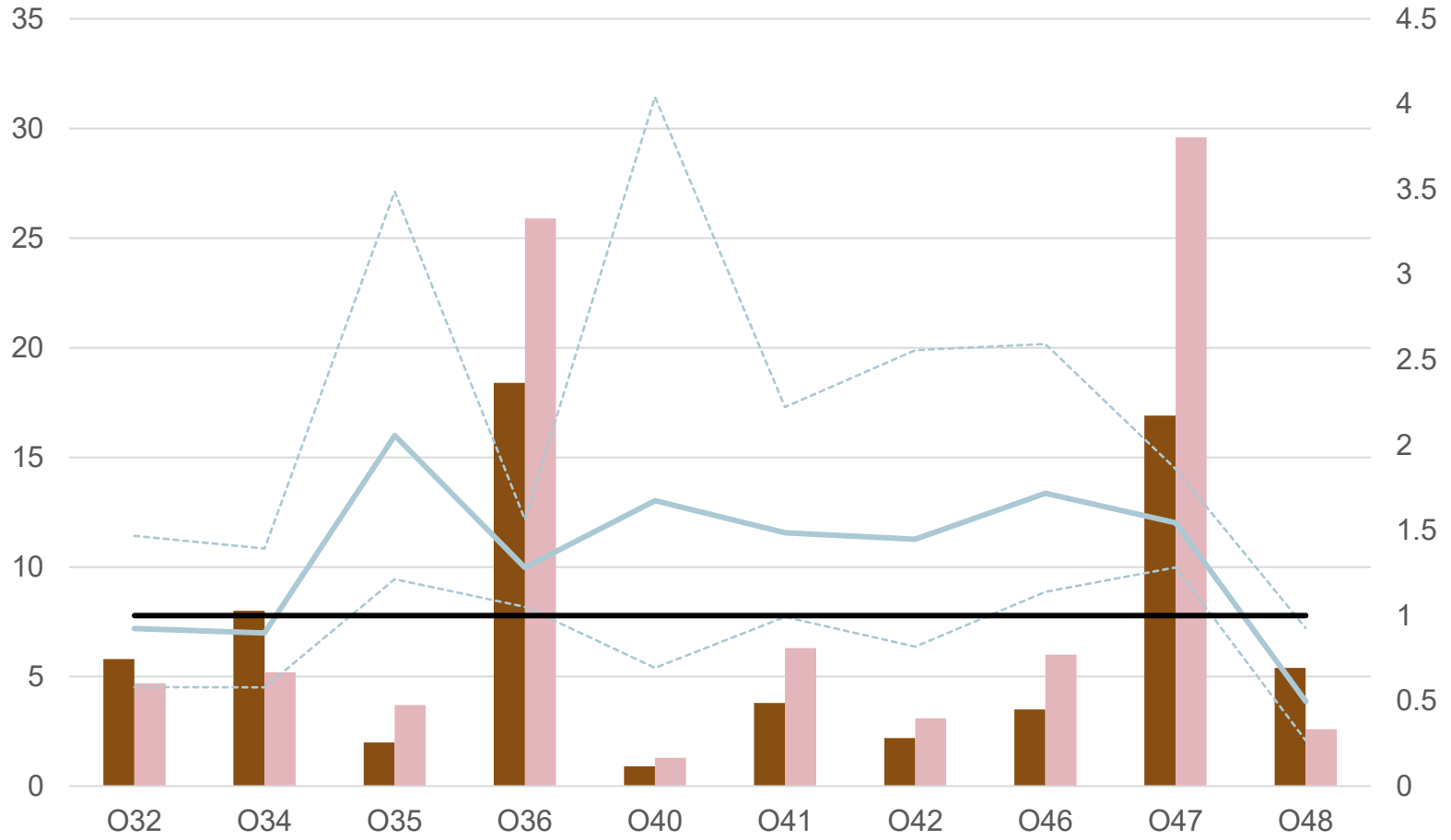
Maternal care



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O32: Malpresentation

O34: Abnormality of pelvic organs

O35: Fetal abnormality and damage

O36: Fetal problems

O40: Polyhydramnios

O41: Amniotic fluid and membranes

O42: Premature rupture of membranes

O46: Antepartum hemorrhage

O47: False labor

O48: Prolonged pregnancy

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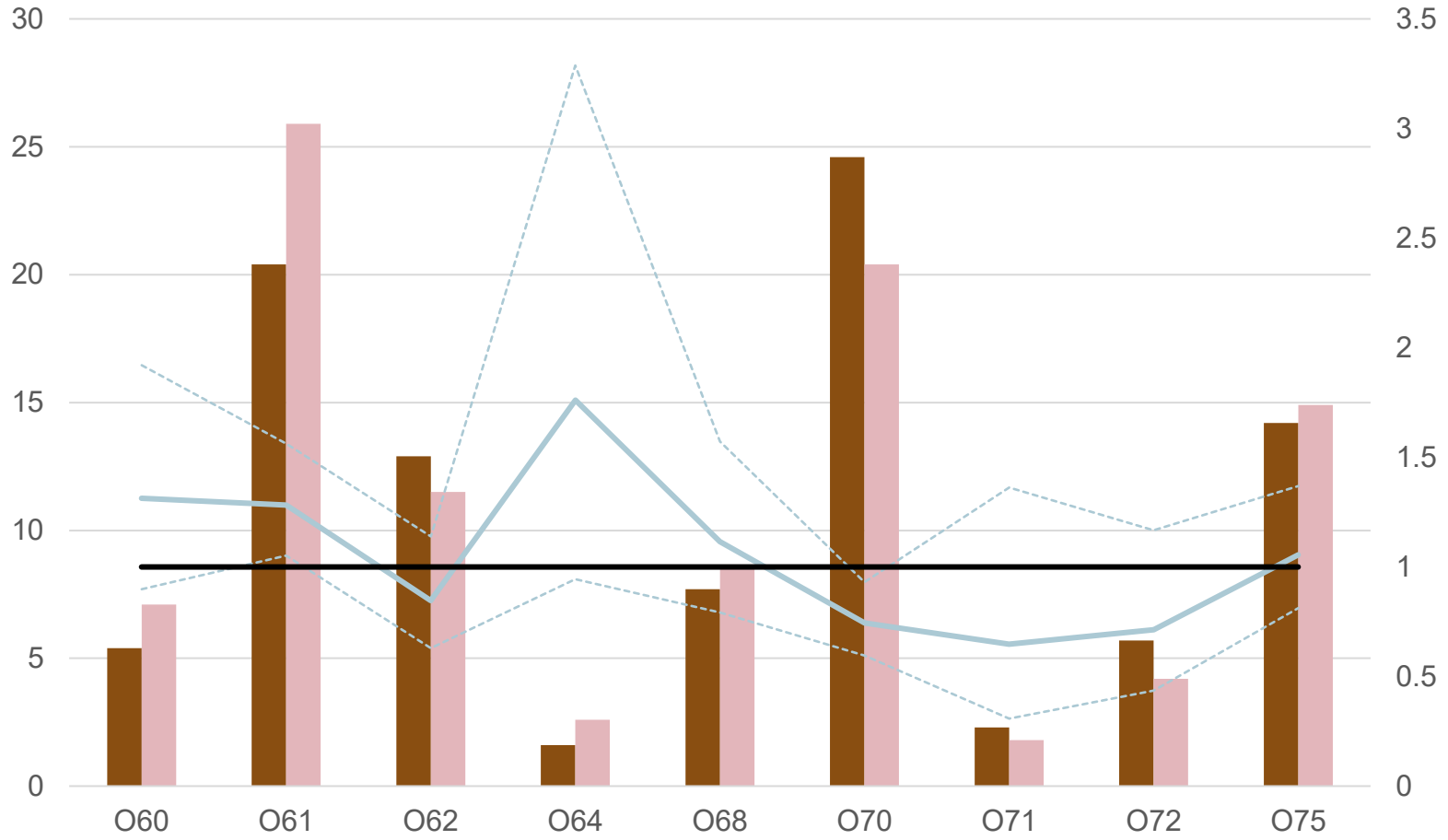
Delivery



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O60: Preterm labor and delivery

O61: Failed induction

O62: Abnormalities of forces of labor

O64: Malposition or malpresentation

O70: Perineal laceration

O72: Postpartum hemorrhage

O75: Other complications

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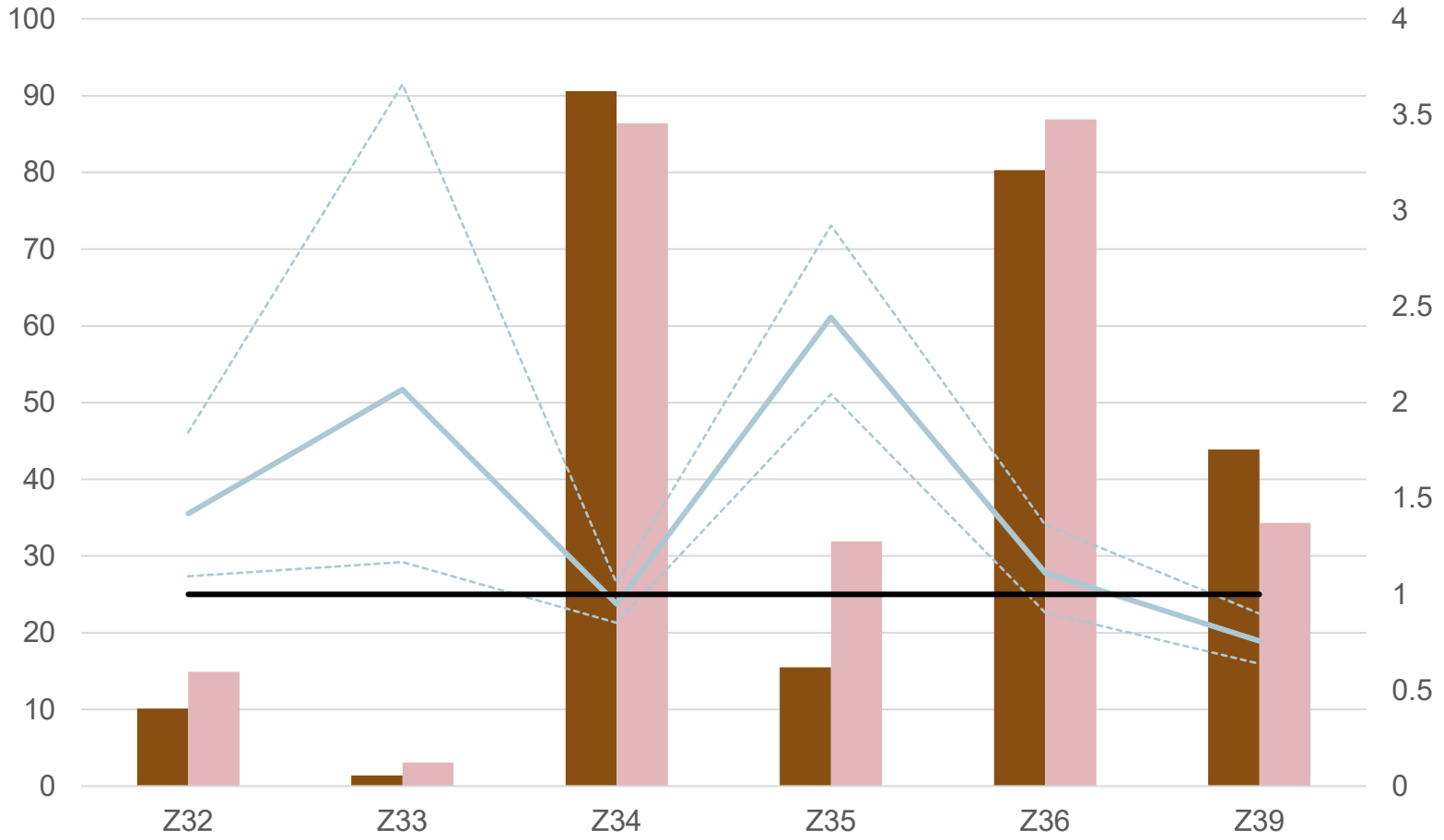
Other contacts



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Z32: Pregnancy examination and test

Z33: Pregnant state, incidental

Z34: Supervision of normal pregnancy

Z35: Supervision of high-risk pregnancy

Z36: Antenatal screening

Z39: Postpartum care and examination

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Summary

- Compared to pregnant women from the general population, pregnant women with intellectual disability were **more likely** to
  - be under supervision for high-risk pregnancy
  - have pre-eclampsia, gestational diabetes mellitus, and infections of the genitourinary tract during pregnancy
  - be diagnosed with fetal abnormality and damage, fetal problems, antepartum hemorrhage, and false labor
  - experience failed induction during delivery
- However, they were **less likely** to
  - have a prolonged pregnancy
  - experience perineal laceration during delivery
  - receive post-partum care and examination

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Comparison with earlier Swedish data

Outcome	Höglund et al	Our study
Cesarean section	1.4 (1.1-1.7)	1.2 (1.0-1.6)
Vacuum extraction	0.6 (0.5-0.9)	1.0 (0.7-1.4)
Prolonged gestation	0.9 (0.8-1.1)	0.5 (0.3-0.9)
Preterm birth	1.6 (1.0-2.5)	1.5 (0.9-2.3)

Höglund, Lindgren, Larsson. Pregnancy and birth outcomes of women with intellectual disability in Sweden: a national register study. Acta Obstet Gynecol Scand. 2012 Dec; 91(12): 1381-1387.

Höglund, Lindgren, Larsson. Newborns of mothers with intellectual disability have a higher risk of perinatal death and being small for gestational age. Acta Obstet Gynecol Scand. 2012 Dec; 91(12): 1409-1414.

Conclusions

Swedish women with intellectual disabilities receive more supervision for high-risk pregnancies

However, they (still) have increased risk of several unfavorable pregnancy outcomes

Even more efforts are needed to ensure a healthy pregnancy and delivery for these women

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