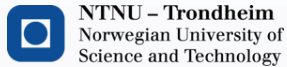


Prevalence of fecal incontinence after vaginal deliveries versus caesarean sections

Kathrine Rømmen^{1,2}, Berit Schei^{1,3}, Astrid Rydning⁴, Anne Kjersti Daltveit⁵, Abdul Sultan⁶, Siv Mørkved^{1,2}

¹ Department of Public Health and General Practice, NTNU, ² Clinical Services, St.Olavs Hospital Trondheim University Hospital, ³ Department of Gynecology, St.Olavs Hospital Trondheim University Hospital, ⁴ Department of Surgery, St.Olavs Hospital Trondheim University Hospital, ⁵ Department of Public Health and Primary Care, University of Bergen ⁶ Croydon University Hospital, Croydon, UK



UNIVERSITY OF BERGEN



Background

There are conflicting results from previous studies comparing risk of fecal incontinence (FI) in women with vaginal deliveries (VD) and women with caesarean section (CS).

Aims

Aim of this study was to investigate if experiencing only VD increases the risk of FI compared to experiencing only CS.

Methods

Population-based health survey in a Norwegian county (HUNT 3). We linked information about FI to data from the Norwegian Medical Birth Registry (MBR).

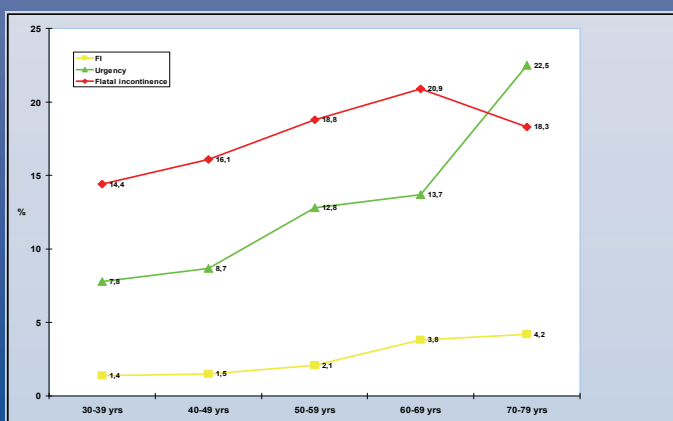
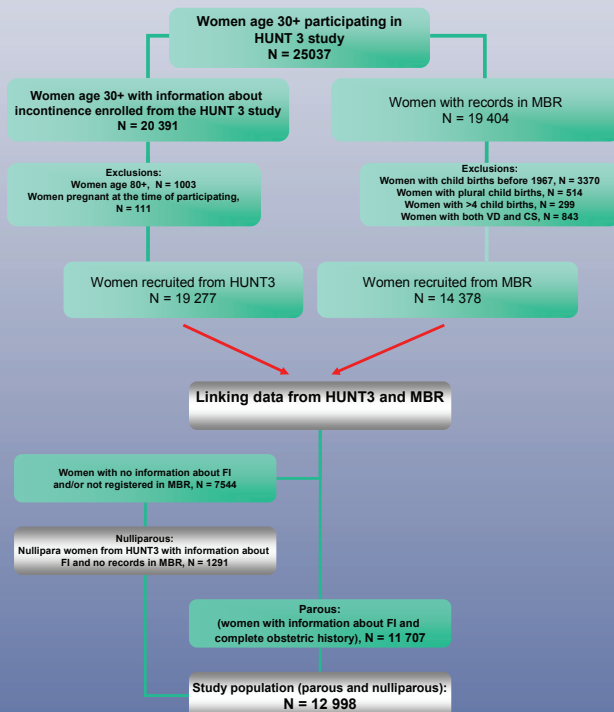


Fig.1 Prevalence of FI, flatal incontinence and urgency among parous women, according to age categories.

Outcome Measures

- FI and flatal incontinence weekly or more often during the last month.
- Urgency (Inability to defer defecation for 15 minutes after first feeling the need to go).

Results

Overall prevalences:

- FI: 2.1% (n=273/12998),
- Flatal incontinence: 17.3 % (n=2252/12998)
- Urgency: 10.8% (n=1409/12998).

AGE CATEGORIES	Nullipara (n=1291)	Only CS (n=1091)	Only VD (n=10 616)
30-39	1.8 (0.4-3.3)	1.5 (0.2-2.8)	1.4 (0.9-1.9)
40-49	1.4 (0.0-2.8)	1.0 (0.1-2.0)	1.6 (1.1-2.0)
50-59	1.5 (0.0-3.0)	2.4 (0.3-4.4)	2.1 (1.7-2.6)
60-69	4.2 (1.7-6.8)	5.7 (-0.8-12.1)	3.8 (2.8-4.7)
70-79	6.0 (2.6-9.5)	.*	4.8 (-0.7-10.3)
Total	2.7 (1.8-3.6)	1.7 (0.9-2.4)	2.1 (1.8-2.3)

*Results omitted because n = 9 women in this group.

VARIABLES, (N)	Crude OR (95%CI)	p-value	Age-adjusted OR (95%CI)	p-value
Primiparous, (1352):				
Only CS (236)	1		1	
Only VD (1116)	0.89 (0.33-2.37)	0.81	0.79 (0.29-2.16)	0.64
Two deliveries, (5591):				
Only CS (510)	1		1	
Only VD (5081)	1.06 (0.55-2.03)	0.87	0.90 (0.46-1.75)	0.75
Three deliveries, (3899):				
Only CS (287)	1		1	
Only VD (3612)	2.12 (0.66-6.75)	0.21	1.59 (0.49-5.15)	0.44
Total, (11 707):				
Only CS (1091)	1		1	
Only VD (10616)	1.26 (0.78-2.05)	0.35	1.05 (0.64-1.71)	0.85

Conclusion

- Prevalence of fecal incontinence does not differ significantly between women experiencing only vaginal deliveries and women experiencing only caesarean sections.
- Women undergoing caesarean sections may not have a reduced risk of fecal incontinence.

Acknowledgements

This study was funded by Norwegian University of Science and Technology.

Contact details: kathrine.rommen@ntnu.no, phone: +4741318550