Johannessen H H¹, Stordahl A¹, Wibe A², Morkved S²

1. Ostfold Health Care Trust, Norway, **2.** Norwegian University of Science and Technology and St. Olavs Hospital, Trondheim University Hospital, Trondheim, Norway

ANAL AND URINARY INCONTINENCE IN LATE PREGNANCY AMONG FIRST TIME MOTHERS

Hypothesis / aims of study

The aim of this study was to investigate the prevalence of symptomatic anal and urinary incontinence among first time mothers in the last four weeks of their pregnancy.

Study design, materials and methods

Between May 2009 and December 2010 all primiparous women over the age of 18 in two different hospitals were invited to take part in the study. They received questionnaires before discharge from the maternity ward. The outcome measures were self-reported symptoms of anal and urinary incontinence as measured by two validated questionnaires, St. Mark's and ICI-Q SF, during the last four weeks of pregnancy. Anal incontinence were defined as scoring 3 or more points on the total St. Mark's score and urinary incontinence as reporting leakage of urine 2-3 times weekly or more on the ICI-Q SF score.

Health related quality of life in women with anal incontinence was measured by the disease specific questionnaire, Fecal Incontinence Quality of Life (FIQL), though these results will not be reported here. If the questionnaires were not returned within four weeks, postal questionnaires were distributed once. The women are followed at 6 and 12 months postpartum. Only results from the first part of the survey are presented as the data collection is still ongoing in the follow-up period.

Results

A total of 1578 in-patient primiparous women were included in the survey. The mean age of the participating women was 28.3 years (range 18-46). Weekly or daily incontinence for stools was reported by 4.6%, and 11.8% reported incontinence of flatus on a weekly or daily basis (Table 1). One in five women (20.4%) experienced problems with deferring defecation for 15 minutes. Urinary incontinence once per week or more was reported by 18.5% (n= 291), 36 women (2.2%) reported that the urinary incontinence had moderate or severe impact on her quality of life (Table 2).

Table 1. Frequencies of different symptoms of anal incontinence in primiparous women in the last four weeks of their pregnancy.

Symptoms of incontinence	Never	•	Rare	ely	Mont	hly	Wee	ekly	Daily	/
	%	(n)	%	(n)	%	(n)	%	(n)	%	(n)
Formed stool	88.9	(1396)	3.0	(47)	3.6	(57)	1.3	(21)	1.1	(18)
Loose stool	84.5	(1328)	7.3	(114)	3.8	(60)	1.3	(20)	0.9	(14)
Flatus	51.0	(801)	18.0	(282)	17.1	(269)	6.6	(103)	5.2	(82)
	Yes		No							
	%	(n)	%	(n)						
Able to defer defecation for 15 min	78.2	(1228)	20.4	(321)						

Table 2. Frequencies and amounts of urinary leakage in primiparous women, and the impact on quality of life in the last four weeks of their pregnancy. (N= 1571)

Never / less than once						Daily/	/ all	
 per week		2-3 time	s weekly	Once daily		the time		
%	(n)	%	(n)	%	(n)	%	(n)	

Frequency of urinary leakage	81.5	(1280)	8.2	(129)	4.8	(76)	5.5	(86)
	Nothin	g	Smal	Il amount	Mod amo	erate unt	Lar	ge ount
	%	(n)	%	(n)	%	(n)	%	(n)
Amount of leakage	59.1	(931)	38.7	(609)	1.5	(24)	0.3	(4)
	Contin	ent (0-2p)	Low 5p)	impact (3	Mod 3- impa 7p)	erate act (6	Sev 6- imp	act (8-
	%	(n)	%	(n)	%	(n)	%	(n)
Impact on Quality of Life (NRS, 0-10p)	91.4	(1439)	6.3	(99)	1.1	(18)	1.1	(18)

Interpretation of results

This study found that 4.6% of primiparous women reported incontinence of formed or loose stools weekly or more in late pregnancy, while urinary incontinence once per week or more was reported by 18.5%. Impact on quality of life was reported by 8.5% of the women with urinary incontinence. Follow-up of the cohort throughout the first year after delivery will give additional information about development of incontinence related to pregnancy and delivery.

Concluding message

One in five primiparous women experienced weekly anal and/or urinary incontinence during the last weeks of their pregnancy. Strategies to prevent and treat incontinence in women in the childbearing period should be implemented in health care services.

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Is this a clinical trial?	Yes						
Is this study registered in a public clinical trials registry?	Yes						
Specify Name of Public Registry, Registration Number	ClinicalTrials.gov NCT00970320						
Is this a Randomised Controlled Trial (RCT)?	Yes						
What were the subjects in the study?	HUMAN						
Was this study approved by an ethics committee?	Yes						
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Was the Declaration of Helsinki followed?	Yes						
Was informed consent obtained from the patients?	Yes						