

Supplementary Table 1

Parturient, labor, and labor analgesia information for the 7876 parturients with known satisfaction score in Helsinki, Finland, area delivery hospitals in 2022

Onset of labor	Induced or spontaneous (all parturients in the study)				Induced				Spontaneous				Induced vs spontaneous
Satisfaction category	Poor	Fair-Good	Excellent	All	Poor	Fair-Good	Excellent	All	Poor	Fair-Good	Excellent	All	All
Satisfaction numeral rating scale value	<8/0-10	8-9/0-10	10/0-10		<8/0-10	8-9/0-10	10/0-10		<8/0-10	8-9/0-10	10/0-10		
N	1670	3065	3141	7876	651 (24.5 %)	1059 (39.9 %)	944 (35.6 %)	2654	1019 (19.5 %)	2006 (38.4 %)	2197 (42.1 %)	5222	p-value
Pre-neuraxial analgesia factors													
Background factors													
Age (yr)	32.4 (5.0)	32.4 (5.0)	32.6 (5.0)	32.5 (5.0)	32.7 (5.0)	32.4 (4.9)	32.4 (4.9)	32.5 (5.0)	32.3 (4.8)	32.4 (4.9)	32.6 (4.9)	32.5 (4.9)	0.475
BMI (kg/m2)	25.7 (5.5)	25.5 (5.2)	25.1 (4.9)	25.4 (5.2)	26.6 (6.0)	26.7 (5.9)	26.4 (5.9)	26.6 (5.9)	25.1 (5.0)	24.9 (4.6)	24.5 (4.3)	24.8 (4.6)	<0.001
Primiparous	1290 (77.2 %)	2294 (74.8 %)	2267 (72.2 %)	5851 (74.3 %)	477 (73.3 %)	735 (69.4 %)	637 (67.5 %)	1849 (69.7 %)	813 (79.8 %)	1559 (77.7 %)	1630 (74.2 %)	4002 (76.6 %)	<0.001
Prior fear of childbirth dg	297 (17.8 %)	432 (14.1 %)	347 (11.0 %)	1076 (13.7 %)	117 (18.0 %)	187 (17.7 %)	134 (14.2 %)	438 (18.5 %)	180 (17.7 %)	245 (12.2 %)	213 (9.7 %)	638 (12.2 %)	<0.001
Exogenous oxytocin	752 (45.0 %)	1390 (45.4 %)	1336 (42.5 %)	3478 (44.2 %)	449 (69.0 %)	805 (76.0 %)	708 (75.0 %)	1962 (73.9 %)	303 (29.7 %)	585 (29.2 %)	628 (28.6 %)	1516 (29.0 %)	<0.001
Prior labor analgesia													
Oxycodone i.m. during labor	577 (34.6 %)	958 (31.3 %)	812 (25.9 %)	2347 (29.8 %)	269 (41.3 %)	414 (39.1 %)	311 (32.9 %)	994 (37.5 %)	308 (30.2 %)	544 (27.1 %)	501 (22.8 %)	1353 (25.9 %)	<0.001
Neuraxial analgesia													
Cervix at neuraxial initiation (cm)	5.51 (1.99)	5.61 (1.89)	5.69 (1.87)	5.62 (1.90)	5.3 (1.8)	5.3 (1.7)	5.3 (1.7)	5.3 (1.8)	5.6 (2.1)	5.8 (1.9)	5.9 (1.9)	5.8 (2.0)	<0.001
Resident anesthetist	660 (39.5 %)	1157 (37.7 %)	1162 (37.0 %)	2979 (37.8 %)	252 (38.8 %)	436 (41.2 %)	362 (38.4 %)	1050 (39.6 %)	408 (40.2 %)	721 (36.1 %)	800 (36.6 %)	1929 (37.1 %)	0.027
Analgesia type													
Epidural analgesia	944 (56.5 %)	1821 (59.4 %)	1937 (61.7 %)	4702 (59.7 %)	337 (51.8 %)	568 (53.6 %)	552 (58.5 %)	1457 (54.9 %)	607 (59.6 %)	1253 (62.5 %)	1385 (63.0 %)	3245 (62.1 %)	<0.001
i.t. fentanyl (CSE)	544 (32.6 %)	850 (27.7 %)	763 (24.3 %)	2157 (27.4 %)	259 (39.8 %)	401 (37.9 %)	313 (33.2 %)	973 (36.7 %)	285 (28.0 %)	449 (22.4 %)	450 (20.5 %)	1184 (22.7 %)	<0.001
i.t. fentanyl and bupivacaine (CSE)	139 (8.3 %)	319 (10.4 %)	353 (11.2 %)	811 (10.3 %)	40 (6.1 %)	74 (7.0 %)	67 (7.1 %)	181 (6.8 %)	99 (9.7 %)	245 (12.2 %)	286 (13.0 %)	630 (12.1 %)	<0.001
i.t. fentanyl and bupivacaine (single dose)	43 (2.6 %)	75 (2.4 %)	88 (2.8 %)	206 (2.6 %)	15 (2.3 %)	16 (1.5 %)	12 (1.3 %)	43 (1.6 %)	28 (2.7 %)	59 (2.9 %)	76 (3.5 %)	163 (3.1 %)	<0.001
Analgesia related post analgesia events													
Analgesia duration (h)	6.16 (4.74)	5.79 (4.21)	5.32 (3.81)	5.68 (4.19)	6.6 (4.8)	6.3 (4.5)	6.0 (4.3)	6.3 (4.5)	5.9 (4.7)	5.5 (4.0)	5.0 (3.5)	5.4 (4.0)	<0.001
Neuraxial analgesia use (total doses)	2.88 (1.32)	2.82 (1.20)	2.76 (1.11)	2.81 (1.19)	3.06 (1.28)	2.93 (1.16)	2.87 (1.03)	2.95 (1.15)	2.76 (1.33)	2.76 (1.21)	2.71 (1.14)	2.74 (1.21)	<0.001
Manual maintenance boluses per hour	0.41 (0.59)	0.39 (0.46)	0.41 (0.44)	0.40 (0.48)	0.43 (0.54)	0.41 (0.50)	0.41 (0.41)	0.42 (0.48)	0.40 (0.62)	0.29 (0.44)	0.41 (0.45)	0.40 (0.49)	0.320
Epidural catheter resited	152 (9.1 %)	98 (3.2 %)	53 (1.7 %)	303 (3.8 %)	71 (10.9 %)	42 (4.0 %)	16 (1.7 %)	129 (4.9 %)	81 (7.9 %)	56 (2.8 %)	37 (1.7 %)	174 (3.3 %)	<0.001
Epidural blood patch	13 (0.8 %)	12 (0.4 %)	15 (0.5 %)	40 (0.5 %)	4 (0.6 %)	2 (0.2 %)	4 (0.4 %)	10 (0.4 %)	9 (0.9 %)	10 (0.5 %)	11 (0.5 %)	30 (0.6 %)	0.243
Pudental block	337 (20.2 %)	502 (16.4 %)	435 (13.8 %)	1274 (16.2 %)	144 (22.1 %)	179 (16.9 %)	126 (13.3 %)	449 (16.9 %)	193 (18.9 %)	323 (16.1 %)	309 (14.1 %)	825 (15.8 %)	0.202
Delivery													
Vaginal spontaneous	1052 (63.0 %)	2140 (69.8 %)	2390 (76.1 %)	5582 (70.9 %)	386 (59.3 %)	690 (65.2 %)	649 (68.8 %)	1725 (65.0 %)	666 (65.4 %)	1450 (72.5 %)	1741 (79.2 %)	3857 (73.9 %)	<0.001
Vaginal instrumental	288 (17.2 %)	503 (16.4 %)	389 (12.4 %)	1180 (15.0 %)	107 (16.4 %)	172 (16.2 %)	120 (12.7 %)	399 (15.0 %)	181 (17.8 %)	331 (16.5 %)	269 (12.2 %)	781 (15.0 %)	0.927
Intrapartum cesarean delivery	330 (19.8 %)	422 (13.8 %)	362 (11.5 %)	1114 (14.1 %)	158 (24.3 %)	197 (18.6 %)	175 (18.5 %)	530 (20.0 %)	172 (16.9 %)	225 (11.2 %)	187 (8.5 %)	584 (11.2 %)	<0.001
General anesthesia for cesarean delivery	47 (2.8 %)	41 (1.3 %)	35 (1.1 %)	123 (1.6 %)	24 (3.7 %)	16 (1.5 %)	10 (1.1 %)	50 (1.9 %)	23 (2.3 %)	25 (1.2 %)	25 (1.1 %)	73 (1.4 %)	0.100
Birth experience													
Experience score (0-100, mean; SD)	68 (25)	82 (21)	88 (23)	81 (24)	67 (24)	81 (22)	87 (24)	80 (25)	69 (25)	83 (20)	88 (23)	82 (23)	
Experience <50/100 (N (%)) ^a	254 (16.2 %)	180 (6.3 %)	204 (6.9 %)	638 (8.7 %)	97 (16.1 %)	75 (7.6 %)	66 (7.5 %)	238 (9.6 %)	157 (16.3 %)	105 (5.6 %)	138 (6.7 %)	400 (8,2 %)	

^a The birthing experience score was available from 2470 and 4902 parturients in the induced and spontaneous groups, respectively.

Supplementary Table 2

Univariate logistic regression for induction of labor (vs spontaneous onset) in Helsinki, Finland, area hospitals in 2022

	OR (95 % CI)	p
N	7876	
Pre-neuraxial analgesia factors		
Background factors		
Age (yr)	1.00 (0.99-1.01)	0.950
BMI (kg/m ²)	1.07 (1.06-1.08)	<0.001
Primiparous (vs no)	0.70 (0.63-0.78)	<0.001
Prior fear of childbirth dg (vs no)	1.42 (1.25-1.62)	<0.001
Exogenous oxytocin (vs no)	6.93 (6.24-7.70)	<0.001
Prior labor analgesia		
Oxycodone i.m. during labor (vs no)	1.71 (1.55-1.89)	<0.001
Neuraxial analgesia		
Cervix at neuraxial initiation (cm)	0.86 (0.84-0.88)	<0.001
Resident anesthetist (vs specialist)	1.11 (1.01-1.23)	0.027
Analgesia type		
Epidural analgesia (reference)	1	<0.001
i.t. fentanyl (CSE)	1.83 (1.65-2.03)	<0.001
i.t. fentanyl and bupivacaine (CSE)	0.64 (0.64-0.76)	<0.001
i.t. fentanyl and bupivacaine (single dose)	0.59 (0.42-0.64)	0.002
Analgesia related post analgesia events		
Analgesia duration (h)	1.05 (1.04-1.06)	<0.001
Neuraxial analgesia use (total doses)	1.16 (1.11-1.20)	<0.001
Manual maintenance boluses (/h)	1.07 (0.98-1.18)	0.145
Epidural catheter resited (vs no)	1.48 (1.17-1.87)	<0.001
Epidural blood patch (vs no)	0.66 (0.32-1.34)	0.247
Pudendal block (vs no)	0.92 (0.81-1.05)	0.202
Delivery		
Vaginal spontaneous (reference)	1	<0.001
Vaginal instrumental	1.14 (1.00-1.31)	0.050
Intrapartum cesarean delivery	2.03 (1.781-2.31)	<0.001
Anesthesia for cesarean delivery		
General anesthesia (vs regional)	1.35 (0.94-1.95)	0.101

