

Table 1 Newborn characteristics by neonatal intensive care unit (NICU) admission in Amman, Jordan				
Variable	NICU (n = 373)	Non-NICU (n = 5093)	Total (n = 5466)	P-value
Sex				
Female [no. (%)]	165 (44)	2532 (50)	2697 (49)	0.047
Gestational age				
Gestational age (weeks) [median (IQR)]	36 (34–38)	39 (38–40)	39 (38–40)	< 0.001
Age range (weeks)	25–43	24–43	24–43	
Birth weight				
Birth weight (kg) [median (IQR)]	2.2 (1.9–3)	3.1 (2.9–3.5)	3.1 (2.8–3.5)	< 0.001
Weight range (kg)	0.5–5.6	1.3–5.0	0.5–5.6	
Type of delivery [no. (%)]				
Normal spontaneous vaginal	190 (51)	4162 (82)	4352 (80)	< 0.001
Caesarean section	183 (49)	929 (18)	1112 (20)	
Mother's age				
Age (years) [median (IQR)]	27 (23–33)	27 (22–32)	27 (22–32)	0.154
Mother's BMI				
BMI (kg/m ²) [median (IQR)]	25.0 (21.6–28.0)	23.6 (21.3–26.6)	23.8 (21.4–26.7)	< 0.001
Missing values [no. (%)]	176 (47)	3330 (65)	3506 (64)	
Mother's highest education level [no. (%)]				
Primary education	84 (34)	883 (33)	967 (33)	0.347
Secondary education	130 (52)	1293 (49)	1423 (49)	
College education	31 (12)	370 (14)	401 (14)	
No education	4 (2)	92 (3)	96 (3)	
Missing values	124 (33)	2455 (48)	2579 (47)	
Mother's nationality [no. (%)]				
Jordanian	310 (83)	4413 (87)	4723 (86)	0.018
Egyptian	14 (4)	140 (3)	154 (3)	
Palestinian	46 (12)	446 (9)	492 (9)	
Other	2 (1)	94 (2)	96 (2)	
Father's nationality [no. (%)]				
Jordanian	315 (84)	4485 (88)	4800 (88)	0.158
Egyptian	17 (5)	155 (3)	172 (3)	
Palestinian	38 (10)	406 (8)	444 (8)	
Other	3 (1)	47 (1)	50 (1)	
Tobacco smoke exposure [no. (%)]				
Primary exposure	28 (8)	379 (7)	407 (7)	1.000
Secondary exposure	266 (71)	3616 (71)	3882 (71)	0.944
Any exposure	268 (72)	3665 (72)	3933 (72)	1.000
Location of prenatal care [no. (%)]				
MOH	83 (22)	818 (16)	901 (16)	0.002
UNRWA	76 (20)	1053 (21)	1129 (21)	0.943
Private sector	146 (39)	1687 (33)	1833 (34)	0.020
University	1 (< 1)	12 (< 1)	13 (< 1)	1.000
Other	3 (1)	20 (< 1)	23 (< 1)	0.441
None specified	111 (30)	2099 (41)	2210 (40)	
Time spent outdoors				
Median time (IQR) (hours/day)	0.5 (0.5–1.5)	1.0 (0.5–2.0)	1.0 (0.5–2.0)	0.568
Use of supplements				
Took vitamin D during pregnancy [no. (%)]	72 (19)	1128 (22)	1200 (22)	0.224
Supplements taken [no. (%)]				
Folic acid	215 (58)	2351 (46)	2566 (47)	< 0.001
Multivitamins	155 (42)	1140 (22)	1295 (24)	< 0.001
Calcium	151 (40)	1436 (28)	1587 (29)	< 0.001
Calcium with vitamin D	14 (4)	96 (2)	110 (2)	0.022
Vitamin D only	0 (0)	6 (< 1)	6 (< 1)	1.000
Iron	225 (60)	2309 (45)	2534 (46)	< 0.001
Unknown vitamin	2 (1)	39 (1)	41 (1)	0.853
Other	6 (2)	29 (1)	35 (1)	0.036
Any vitamin D supplementation	162 (43)	1214 (24)	1376 (25)	< 0.001
Received any vaccinations during pregnancy [no. (%)]				
	79 (21)	1216 (24)	1295 (24)	0.263
Mother's medical history [no. (%)]				
Hyperparathyroidism	0 (0)	4 (< 1)	4 (< 1)	1.000
Diabetes	9 (2)	2 (< 1)	11 (< 1)	< 0.001
Gestational diabetes	8 (2)	16 (< 1)	24 (< 1)	< 0.001
Thyroid dysfunction	3 (1)	34 (1)	37 (1)	1.000
Renal failure	0 (0)	3 (< 1)	3 (< 1)	1.000
Heart disease	1 (< 1)	9 (< 1)	10 (< 1)	1.000
Asthma	0 (0)	38 (1)	38 (1)	0.177
Rheumatoid arthritis	15 (4)	105 (2)	120 (2)	0.021
Chronic disease requiring steroids	1 (< 1)	6 (< 1)	7 (< 1)	0.973
Hypertension	7 (2)	42 (1)	49 (1)	0.072
Gestational (pregnancy-induced) hypertension	21 (6)	71 (1)	92 (2)	< 0.001
Total newborn vitamin D				
Vitamin D level (nmol/L) [median (IQR)]	3.5 (2.4–5.2)	3.5 (2.3–5.0)	3.5 (2.3–5.0)	0.269
Missing values [no. (%)]	39 (10)	1517 (30)	1556 (28)	

IRQ = interquartile range; BMI = body mass index; MOH = Ministry of Health; UNRWA = United Nations Relief and Works Agency for Palestine Refugees in the Near East.