

Table S1. Factors associated with non-adherence to the hepatitis B virus (HBV) birth dose administration within 7 days of birth in children born on or after 1 January 2016 living in the mostly rural area of Niakhar (*n* = 241 children participating in the ANRS 12356 AmBASS survey with available vaccination data, logistic regression models using weighted and calibrated data).

Characteristics (% of missing data)	BD received >7 days after birth/not received (<i>n</i> =101) %	BD received ≤ 7 days after birth (<i>n</i> =140) %	Univariable analysis		Multivariable analysis	
			OR [95% CI]	<i>P</i> value	aOR [95% CI]	<i>P</i> value
Sex (0.0)						
Male (ref.)	39.1	50.0	1	0.157		
Female	60.9	50.0	1.56 [0.81–1.98]			
Season of birth (0.0)						
Wet season (ref.)	31.8	42.5	1	0.142	1	0.077
Dry season	68.2	57.5	1.59 [0.83–3.05]		1.84 [0.92–3.67]	
Place of birth (0.0)						
Healthcare facility (ref.)	72.9	84.3	1	0.067	1	0.045
Home	27.1	15.7	1.99 [0.94–4.20]		2.29 [1.02–5.13]	
Birth order (0.7)						
1	21.2	16.5	1.36 [0.61–3.05]	0.407		
≥2 (ref.)	78.8	83.5	1			
Type of village (0.0)						
Semi-urban (ref.)	56.2	60.5	1	0.580		
Rural	43.8	39.5	1.19 [0.59–2.40]			
Distance to closest healthcare post (0.7)						
≤3 km (ref.)	68.7	72.6	1	0.574		
>3 km	31.3	27.4	1.20 [0.58–2.53]			
Mother's age at child's birth (years) (1.5)						
≤19	7.5	5.1	1.66 [0.35–7.78]	0.729		
20–29	49.9	46.7	1.21 [0.65–2.46]			
≥30 (ref.)	42.6	48.2	1			
Prenatal consultation during mother's most recent pregnancy (9.9)						
Yes (ref.)	98.0	94.6	1	0.259		
No	2.0	5.4	0.36 [0.05–2.47]			

Mother's marital status (11.2)						
Married (ref.)	95.0	98.1	1	0.264		
Not married (single, widowed, divorced)	5.0	1.9	2.72 [0.41-18.18]			
Mother's educational level (2.9)						
No schooling (ref.)	65.7	69.7	1			
Primary school	22.7	15.9	1.52 [0.65-3.58]	0.529		
Secondary school and higher	11.6	14.4	0.85 [0.38-1.94]			
Father's educational level (22.6)						
No schooling (ref.)	62.1	54.7	1			
Primary school	25.0	24.9	0.88 [0.42-1.85]	0.664		
Secondary school and higher	12.9	20.4	0.56 [0.14-2.15]			
Household living conditions index ¹ (0.0)						
1 st quartile	17.5	9.95	2.37 [0.90-6.28]			
2 nd quartile	22.9	20.7	1.49 [0.53-4.21]			
3 rd quartile	28.4	27.2	1.41 [0.61-3.27]	0.423		
4 th quartile (ref.)	31.2	42.1	1			
Household agricultural wealth index ¹ (0.0)						
1 st quartile	24.0	19.5	1.53 [0.55-4.25]			
2 nd quartile	21.7	17.3	1.56 [0.60-4.03]			
3 rd quartile	24.5	26.4	1.15 [0.51-2.57]	0.745		
4 th quartile (ref.)	29.8	36.8	1			
Born in 2016 (0.0)						
Yes (ref.)	53.8	20.6	4.50 [2.05-9.86]	0.002	4.97 [2.21-11.20]	0.002
No (2017-2018)	46.2	79.4	1		1	

OR = odds ratio; Aor = adjusted odds ratio; CI = confidence interval; ¹ The household living conditions index and the agricultural wealth index were built using a multiple correspondence analysis of information on durable goods, agricultural and farming resources, and housing characteristics at the household level.

Table S2. Factors associated with non-adherence to the three-dose hepatitis B virus (HBV) vaccine schedule (birth dose and two-dose pentavalent, with the birth dose received >7 days/not received) in children born on or after 1 January 2016 living in the mostly rural area of Niakhar (*n* = 241 children participating in the ANRS 12356 AmbASS survey with available vaccination data, logistic regression models using weighted and calibrated data).

Characteristics (% of missing data)	Non-adherence to the three-dose schedule (<i>n</i> = 129)	Adherence to the three-dose schedule (<i>n</i> = 112)	Univariable analysis		Multivariable analysis	
			OR [95% CI]	P value	aOR [95% CI]	P value
Sex (0.0)						
Male (ref.)	42.3	48.9	1			
Female	57.5	51.1	1.29 [0.65–2.59]	0.424		
Season of birth (0.0)						
Wet season (ref.)	31.1	46.0	1		1	
Dry season	68.9	54.0	1.88 [0.99–3.58]	0.054	2.43 [1.26–4.69]	0.014
Place of birth (0.0)						
Healthcare facility (ref.)	74.5	85.2	1		1	
Home	25.5	14.8	1.98 [0.91–4.28]	0.077	2.32 [1.03–5.23]	0.045
Birth order (0.7)						
1	21.6	14.9	1.57 [0.69–3.53]			
≥2 (ref.)	78.4	85.1	1	0.244		
Type of village (0.0)						
Semi-urban (ref.)	59.4	57.9	1			
Rural	40.6	42.1	0.94 [0.48–1.85]	0.847		
Distance to closest healthcare post (0.7)						
≤3 km (ref.)	67.4	75.0	1		1	
>3 km	32.6	25.0	1.45 [0.75–2.82]	0.236	2.02 [0.92–4.43]	0.074
Mother's age at child's birth (years) (1.5)						
≤19	8.6	2.9	3.64 [0.62–21.26]			
20–29	49.6	46.1	1.32 [0.70–2.47]	0.321		
≥30 (ref.)	41.8	51.0	1			
Prenatal consultation during mother's most recent pregnancy (9.9)						
Yes (ref.)	98.4	93.3	1			
No	1.6	6.7	0.22 [0.03–1.49]	0.108		
Mother's marital status (11.2)						
Married (ref.)	96.1	97.7	1			
Not married (single, widowed, divorced)	3.9	2.3	1.70 [0.26–11.30]	0.543		
Mother's educational level (2.9)						
No schooling (ref.)	68.5	67.5	1			
Primary school	19.9	17.3	1.13 [0.46–2.82]	0.731		

Secondary school and above	11.6	15.2	0.76 [0.33-1.72]			
Father's educational level (22.6)						
No schooling (ref.)	63.1	51.5	1			
Primary school	23.6	26.5	0.73 [0.33-1.60]	0.532		
Secondary school and above	13.3	22.0	0.35 [0.12-2.00]			
Household living conditions index¹ (0.0)						
1 st quartile	17.7	7.8	2.51 [1.03-6.13]			
2 nd quartile	19.7	23.8	0.92 [0.33-2.55]			
3 rd quartile	26.8	28.7	1.04 [0.50-2.15]	0.292		
4 th quartile (ref.)	35.7	39.7	1			
Household agricultural wealth index¹ (0.0)						
1 st quartile	26.6	15.5	1.97 [0.94-4.15]		3.22 [1.29-8.02]	0.013
2 nd -4 th quartile (ref.)	73.4	84.5	1	0.069	1	
Year of birth (0.0)						
2016	46.5	20.8	3.32 [1.60-6.86]	0.005	3.74 [1.70-8.22]	0.004
2017-2018 (ref.)	53.5	79.2	1		1	

OR = odds ratio; aOR= adjusted odds ratio; CI= confidence interval; ¹ The household living conditions index and the agricultural wealth index were built using a multiple correspondence analysis of information on durable goods, agricultural and farming resources, and housing characteristics at the household level.

Table S3. Factors associated with non-adherence to the four-dose hepatitis B virus (HBV) vaccine schedule in children born on or after 1 January 2016 living in the mostly area of Niakhar (*n* = 241 children participating in the ANRS 12356 AmBASS survey with available vaccination data, logistic regression models using weighted and calibrated data)

Characteristics (% of missing data)	Non-adherence to the four-dose schedule (<i>n</i> = 151)	Adherence to the four-dose schedule (<i>n</i> = 90)	Univariable analysis		Multivariable analysis	
			OR [95% CI]	<i>P</i> value	aOR [95% CI]	<i>P</i> value
Sex (0.0)						
Male (ref.)	45.3	45.8	1	0.946		
Female	54.7	54.2	1.02 [0.49–2.16]			
Season of birth (0.0)						
Wet season (ref.)	34.4	44.0	1	0.274		
Dry season	65.6	56.0	1.49 [0.69–3.26]			
Place of birth (0.0)						
Healthcare facility (ref.)	74.6	87.6	1	0.037	1	0.028
Home	25.4	12.4	2.41 [1.07–5.42]			
Birth order (0.67)						
1	21.3	13.8	1.68 [0.71–3.99]	0.205		
≥2 (ref.)	78.7	86.2	1			

Type of village (0.0)						
Semi-urban (ref.)	61.2	54.6	1	0.402		
Rural	38.8	45.4	0.76 [0.38–1.53]			
Distance to closest healthcare post (0.7)						
≤3 km (ref.)	66.9	77.7	1	0.083	1	0.049
>3 km	33.1	22.3	1.73 [0.92–3.25]		2.12 [1.00–4.50]	
Mother's age at child's birth (years) (1.52)						
≤19	7.8	3.4	2.87 [0.47–17.70]	0.444		
20–29	50.1	44.6	1.39 [0.70–2.76]			
≥30 (ref.)	42.1	52.0	1			
Prenatal consultation during mother's most recent pregnancy (8.3)						
Yes (ref.)	96.8	94.7	1	0.534		
No	3.2	5.3	0.59 [0.09-3.73]			
Mother's marital status (11.2)						
Married (ref.)	95.5	99.0	1	0.172		
Not married (single, widowed, divorced)	4.5	1.0	4.73 [0.44-50.41]			
Mother's educational level (2.9)						
No schooling (ref.)	65.6	71.9	1	0.515		
Primary school	21.4	14.3	1.63 [0.69–3.88]			
Secondary school and higher	13.0	13.8	1.03 [0.43–2.45]			
Father's educational level (22.6)						
No schooling (ref.)	62.0	51.2	1	0.521		
Primary school	25.0	24.9	0.83 [0.34–2.01]			
Secondary school and higher	13.0	23.9	0.45 [0.11–1.88]			
Household living conditions index¹ (0.0)						
1 st quartile	16.8	6.9	2.36 [0.95–5.86]	0.286		
2 nd quartile	19.1	25.9	0.72 [0.25–2.07]			
3 rd quartile	26.1	30.3	0.84 [0.43–1.64]			
4 th quartile (ref.)	38.0	36.9	1			
Household agricultural wealth index¹ (0.0)						
1 st quartile	26.0	13.8	2.18 [1.05–4.56]	0.039	3.59 [1.58–8.18]	0.007

2 nd –4 th quartile (ref.)	74.0	86.2	1		1	
Year of birth (0.0)						
2016	43.0	20.5	2.93 [1.31–6.54]	0.014	3.09 [1.29–7.39]	0.017
2017–2018 (ref.)	57.0	79.5	1		1	

OR = odds ratio; aOR= adjusted odds ratio ; CI= confidence interval; ¹ The household living conditions index and the agricultural wealth index were built using a multiple correspondence analysis of information on durable goods, agricultural and farming resources, and housing characteristics at the household level.