

Table 1 Socio-demographic characteristics of mothers/caretakers living in Semen Bench district in Bench Majji zone, Southern Ethiopia, 2018.

Variables		Case (104)	Control (208)
		N _o (%)	N _o (%)
Resident of respondent	Urban	13(12.5)	27(13.0)
	Rural	91(87.5)	181(87.0)
Relationship to child	Mother	85(81.7)	198(95.2)
	Caretaker	19(18.3)	10(4.8)
Age of mother/caretaker	20-24	11(5.3)	39(13.9)
	25-29	45(22.1)	98(47.1)
	30-34	28(26.9)	56(26.9)
	35-45	20(19.2)	15(7.2)
Marital status	Single	3(2.9)	14(6.7)
	Married	101(97.1)	190(91.3)
	Divorced	0(0)	2(1.0)
	Widowed	0(0)	2(1.0)
Religion	Protestant	85(81.7)	169(81.3)
	Orthodox	18(17.3)	35(16.8)
	Other	1(1.0)	4(1.9)
Ethnic group	Bench	78(75.0)	152(73.1)
	Kefa	23(22.1)	48(23.1)

	Other	3(2.9)	8(3.8)
Educational status of a mother	No formal education	86(82.7)	127(61.1)
	Able to write and read	4(3.8)	17(8.2)
	Elementary	12(11.5)	55(26.4)
	Secondary & above	2(1.9)	9(4.3)
The educational level of father	No formal education	47(45.2)	59(28.4)
	able to write and read	44(42.3)	70(33.7)
	Elementary	9(8.7)	70(33.7)
	Secondary & above	4(3.8)	9(4.3)
Monthly family income	< 500	32(30.8)	18(8.7)
	500-1000	46(44.2)	25(12.0)
	>1000	26(25.0)	165(79.3)

Table 2 Information of the Index Child and Mother/Care Taker in Semen Bench district, Bench Majii zone, Southern Ethiopia, 2018.

<i>Variables</i>		Cases (104)	Controls(208)
		<u>N</u> ₀ (%)	<u>N</u> ₀ (%)
Sex of child	Male	55(52.9)	117(56.3)
	Female	49(47.1)	91(43.7)
Parity	1	9(8.7)	40(19.2)
	2-4	70(67.3)	133(63.9)
	≥5	25(24.0)	35(16.8)
Receive all vaccination	Yes	0(.0)	208(100.0)
	No	104(100.0)	0(.0)
Antenatal visit	Yes	75(72.1)	205(98.6)
	No	29(27.9)	3(1.4)
Post-natal visit	Yes	59(56.7)	192(92.3)
	No	45(43.3)	16(7.7)
Inconvenient appointment time	Yes	50(48.1)	33(15.9)
	No	54(51.9)	175(84.1)
Reason for not getting a vaccination	Vaccine not available	22(21.2)	19(9.1)
	Vaccinators were absent	28(27)	14(6.7)

Table 3. Mothers/caretakers knowledge and Attitude about vaccination in Semen Bench district, Bench Majji zone, southern Ethiopia 2018

Variables		Cases(104)	Controls(208)
		N ₀ (%)	N ₀ (%)
vaccination prevent communicable disease	Yes	99(95.2)	207(99.5)
	No	5(4.8)	1(0.5)
Knew the benefits of immunization	Yes	86(82.7)	204(98.1)
	No	18(17.3)	4(1.9)
Knew the type of diseases prevented by the vaccine	Yes	27(25.9)	124(59.6)
	No	77(74.0)	84(40.4)
Knew the schedule of vaccines	Yes	91(87.5)	208(100.0)
	No	13(12.5)	0(0.0)
knowledge on when measles vaccine is given	Yes	95(91.3)	205(98.6)
	No	9(8.7)	3(1.4)
Knew about vaccine side effects	Yes	87(83.7)	204(98.1)
	No	17(16.3)	4(1.9)
Attitude towards benefits of	Poor Attitude	16(15.4)	6(2.9)

immunization	Good Attitude	88(84.6)	202(97.1)
--------------	---------------	----------	-----------

Table 4 Bivariate and Multivariate logistic regression results for determinants of incomplete vaccination in Semen Bench district, Bench Majii zone, Southern Ethiopia 2018.

Variables		Cases 104	Controls 208	COR (95% C.I)	AOR (95% C.I)
Postnatal care visit	No	45(43.3)	16(7.7)	9.15(4.82,17.37)	4.2(1.67-10.41) *
	Yes	59(56.7)	192(92.3)	1	1
Relation of respondent to child	Care taker	19(18.3)	10(4.8)	4.43(1.97-9.92)	5.3(1.98-14.09) *
	Mother	85(81.7)	198(95.2)	1	1
Mother/Care taker educational status	No formal education	86(82.7)	127(61.1)	0.35(.11,1.07)	0.45(0.11-1.83)
	Able to write and read	4(3.8)	17(8.2)	0.32(0.16-.66)	0.38(0.145-1.04)
	Elementary	12(11.5)	55(26.4)	0.33(0.07,1.56)	0.63(0.05-8.07)
	Secondary & above	2(1.9)	9(4.3)	1	1
Father educational stratus	Able to write and read	44(42.3)	70(33.7)	0.79(.46, 1.35)	0.29(0.36-2.461)
	Elementary	9(8.7)	70(33.7)	0.16(0.73, .36)	0.97(0.12-.79)
	Secondary & above	4(3.8)	9(4.3)	0.56(0.16, 1.93)	.030(.12-1.540)
	No formal education	47(45.2)	59(28.4)	1	1
Family size	≥5	68(65.4)	98(47.1)	2.12(1.30, 3.45)	1.58(0.77-3.23)
	<5	36(34.6)	110(52.9)	1	1
Place of birth	Home	16(15.4)	9(4.3)	4.02(1.71, 9.45)	4.5(1.41-14.27) *
	Health facility	88(84.6)	199(95.7)	1	1
Parity	2-4	70(67.3)	133(63.9)	2.34(1.07, 5.09)	1.67(0.60-4.63)

	≥5	25(24.0)	35(16.8)	3.17(1.31, 7.70)	1.37(0.39-4.85)
	1	9(8.7)	40(19.2)	1	1
Antenatal care Attendance	No	29(27.9)	3(1.4)	26.4(7.82, 89.3)	8.3(1.87-36.91) *
	Yes	75(72.1)	205(98.6)	1	1
Inconvenient appointment time	Yes	50(48.1)	33(15.9)	4.9(2.87, 8.38)	3.44(1.65-7.16) *
	No	54(51.9)	175(84.1)	1	1

***Statistically significant at p < 0.05**