

Supplements

Table S1. Variance inflation (VIF) values of final models of urban and rural women, BDHS 1999-2014

Variables	VIF- Urban	VIF-Rural
Age	1.09	1.29
Education	2.03	1.97
Marital status	1.18	1.12
Wealth index	1.49	1.69
Watching TV at least once a week	1.29	1.32
Currently working	1.08	1.04
No. of household members	1.04	1.05
Contraceptive use	1.12	1.09
Husband education	2.03	1.71
Survey year	1.02	1.05

Table S2. Summary characteristics of the sample by survey year, BDHS 1999-2014

Variable	1999-00	2004	2007	2011	2014
Initial sample of the survey, n	10544	11440	10996	17842	17863
BMI available, n	5055	11176	10836	17309	17683
Pregnant women, n	376	678	709	1036	1059
Final working sample, n	4679	10489	10127	16273	16624
Response rate, %	96.9	98.6	98.4	97.9	97.9

Table S3. Prevalence of BMI categories of reproductive women by age and place of residence in Bangladesh, BDHS 1999 - 2014

		Urban					Rural				
Age groups		1999	2004	2007	2011	2014	1999	2004	2007	2011	2014
Underweight	15-24	32.75 (28.78, 36.98)	30.81 (27.83, 33.97)	27.4 (24.41, 30.61)	20.14 (17.89, 22.6)	20.99 (18.44, 23.79)	48.38 (45.86, 50.92)	38.91 (36.79, 41.08)	33.95 (31.7, 36.26)	34.01 (32.2, 35.87)	27.45 (25.42, 29.58)
	25-34	27.16 (23.64, 31)	20.91 (18.54, 23.5)	17.35 (15.12, 19.83)	11.23 (9.68, 13)	8.34 (6.98, 9.92)	45.07 (42.38, 47.79)	34.26 (32.21, 36.37)	29.2 (27.08, 31.41)	24.12 (22.65, 25.66)	17.81 (16.16, 19.6)
	35-44	28.42 (20.42, 38.06)	21.4 (18.58, 24.51)	14.18 (12.04, 16.63)	9.53 (7.94, 11.4)	9.37 (7.69, 11.38)	57.48 (52.25, 62.55)	35.4 (32.99, 37.89)	32.94 (30.5, 35.48)	24.75 (23.05, 26.53)	17.98 (16.13, 19.99)
	45+	35.89 (8.84, 76.36)	30.27 (25.06, 36.03)	20.51 (16.36, 25.39)	12.56 (9.83, 15.92)	10.61 (7.61, 14.61)	60.97 (42.57, 76.7)	42.56 (38.75, 46.46)	37.24 (33.25, 41.42)	30.41 (27.56, 33.42)	23.58 (20.29, 27.22)
	Overall	29.73 (27.21, 32.39)	24.84 (23.32, 26.42)	19.54 (18.17, 20.99)	13.46 (12.45, 14.54)	12.2 (11.16, 13.34)	48.18 (46.47, 49.91)	36.89 (35.7, 38.11)	32.44 (31.2, 33.71)	27.82 (26.91, 28.76)	21.08 (20.06, 22.15)
Normal weight	15-24	50.62 (46.22, 55.01)	53.21 (49.83, 56.56)	50.64 (47.17, 54.11)	53.98 (50.91, 57.02)	45.47 (42.22, 48.77)	47.42 (44.89, 49.95)	53.54 (51.33, 55.74)	55.29 (52.86, 57.69)	52.08 (50.14, 54)	50.84 (48.49, 53.18)
	25-34	41.45 (37.43, 45.59)	44.68 (41.65, 47.75)	41.3 (38.23, 44.45)	37.8 (35.15, 40.51)	32.71 (30.19, 35.34)	46.8 (44.08, 49.54)	51.15 (48.95, 53.35)	51.6 (49.21, 53.98)	48.32 (46.57, 50.08)	44.57 (42.49, 46.67)
	35-44	45.09 (35.42, 55.14)	37.9 (34.44, 41.5)	35.36 (32.17, 38.68)	34 (31.08, 37.05)	27.75 (24.94, 30.74)	35.71 (30.86, 40.88)	46.98 (44.42, 49.55)	47.49 (44.83, 50.16)	47.15 (45.16, 49.15)	42.17 (39.77, 44.61)
	45+	19.96 (4.12, 59.13)	33.66 (28.29, 39.49)	36.66 (31.3, 42.36)	37.87 (33.33, 42.63)	32.15 (27.54, 37.14)	35.62 (20.55, 54.2)	40.37 (36.59, 44.27)	41.94 (37.8, 46.2)	43.56 (40.47, 46.71)	41.06 (37.55, 44.66)
	Overall	45.64 (42.81, 48.51)	44.47 (42.65, 46.3)	41.72 (39.93, 43.53)	41.39 (39.8, 43)	34.72 (33.15, 36.33)	45.76 (44.03, 47.49)	49.82 (48.55, 51.08)	50.72 (49.36, 52.08)	48.58 (47.56, 49.61)	45.29 (44.05, 46.53)
Overweight	15-24	14.31 (11.51, 17.65)	12.51 (10.46, 14.89)	17.63 (15.1, 20.47)	20.18 (17.81, 22.79)	25.42 (22.67, 28.38)	3.36 (2.58, 4.37)	6.7 (5.67, 7.89)	9.56 (8.19, 11.14)	11.81 (10.63, 13.1)	17.95 (16.33, 19.7)
	25-34	23.9 (20.55, 27.6)	25.73 (23.15, 28.49)	28.99 (26.19, 31.96)	35.56 (32.95, 38.26)	37.7 (35.09, 40.38)	6.74 (5.49, 8.24)	12.09 (10.72, 13.6)	15.66 (14, 17.48)	22.03 (20.61, 23.52)	29.31 (27.47, 31.23)
	35-44	15.79 (9.58, 24.92)	26.82 (23.77, 30.11)	33.17 (30.02, 36.48)	35.55 (32.57, 38.66)	37.62 (34.59, 40.74)	6.1 (4.06, 9.08)	15.05 (13.29, 17)	15.67 (13.83, 17.71)	22.4 (20.78, 24.1)	30.09 (27.93, 32.34)
	45+	26.19 (3.91, 75.55)	23.39 (18.71, 28.83)	27.28 (22.51, 32.65)	30.3 (26.11, 34.84)	31.21 (26.62, 36.19)	3.4 (0.47, 20.56)	15 (12.32, 18.14)	16.66 (13.73, 20.07)	20.06 (17.69, 22.67)	27.57 (23.99, 31.47)
	Overall	19.08 (16.95, 21.42)	21.87 (20.42, 23.39)	26.87 (25.28, 28.53)	30.62 (29.14, 32.14)	33.74 (32.19, 35.32)	5.02 (4.33, 5.83)	11.35 (10.57, 12.18)	13.87 (12.96, 14.84)	18.96 (18.18, 19.78)	26.24 (25.17, 27.34)
Obese	15-24	2.3 (1.28, 4.1)	3.44 (2.4, 4.92)	4.31 (3.07, 6.02)	5.67 (4.44, 7.22)	8.09 (6.49, 10.05)	0.82 (0.46, 1.44)	0.83 (0.51, 1.35)	1.18 (0.75, 1.86)	2.08 (1.59, 2.71)	3.74 (3.01, 4.64)
	25-34	7.47 (5.54, 10)	8.65 (7.03, 10.6)	12.33 (10.41, 14.55)	15.39 (13.48, 17.52)	21.23 (18.96, 23.69)	1.37 (0.86, 2.18)	2.47 (1.86, 3.29)	3.52 (2.72, 4.55)	5.51 (4.76, 6.36)	8.28 (7.32, 9.36)
	35-44	10.68 (5.53, 19.6)	13.86 (11.59, 16.48)	17.26 (14.78, 20.07)	20.9 (18.41, 23.62)	25.24 (22.51, 28.19)	0.68 (0.17, 2.71)	2.56 (1.83, 3.56)	3.88 (2.99, 5.02)	5.68 (4.83, 6.66)	9.74 (8.53, 11.1)
	45+	17.94 (2.42, 65.83)	12.66 (9.27, 17.07)	15.53 (11.73, 20.29)	19.25 (15.73, 23.34)	26.01 (21.83, 30.67)	NA	2.05 (1.2, 3.49)	4.14 (2.69, 6.32)	5.94 (4.64, 7.58)	7.77 (6.2, 9.69)
	Overall	5.52 (4.32, 7.04)	8.81 (7.84, 9.88)	11.85 (10.71, 13.08)	14.51 (13.41, 15.69)	19.32 (18.01, 20.69)	1.02 (0.72, 1.44)	1.92 (1.59, 2.31)	2.95 (2.52, 3.45)	4.61 (4.2, 5.06)	7.37 (6.82, 7.97)

Table S4. Prevalence of BMI categories of reproductive women by age and place of residence in Bangladesh, BDHS 1999 - 2014 (**International cutoff**)

		Urban					Rural				
		1999	2004	2007	2011	2014	1999-00	2004	2007	2011	2014
Underweight		32.75 (28.78, 36.98)	30.81 (27.83, 33.97)	27.4 (24.41, 30.61)	20.14 (17.89, 22.6)	20.99 (18.44, 23.79)	48.38 (45.86, 50.92)	38.91 (36.79, 41.08)	33.95 (31.7, 36.26)	34.01 (32.2, 35.87)	27.45 (25.42, 29.58)
		27.16 (23.64, 31)	20.91 (18.54, 23.5)	17.35 (15.12, 19.83)	11.23 (9.68, 13)	8.34 (6.98, 9.92)	45.07 (42.38, 47.79)	34.26 (32.21, 36.37)	29.2 (27.08, 31.41)	24.12 (22.65, 25.66)	17.81 (16.16, 19.6)
		28.42 (20.42, 38.06)	21.4 (18.58, 24.51)	14.18 (12.04, 16.63)	9.53 (7.94, 11.4)	9.37 (7.69, 11.38)	57.48 (52.25, 62.55)	35.4 (32.99, 37.89)	32.94 (30.5, 35.48)	24.75 (23.05, 26.53)	17.98 (16.13, 19.99)
		35.89 (8.84, 76.36)	30.27 (25.06, 36.03)	20.51 (16.36, 25.39)	12.56 (9.83, 15.92)	10.61 (7.61, 14.61)	60.97 (42.57, 76.7)	42.56 (38.75, 46.46)	37.24 (33.25, 41.42)	30.41 (27.56, 33.42)	23.58 (20.29, 27.22)
		29.73 (27.21, 32.39)	24.84 (23.32, 26.42)	19.54 (18.17, 20.99)	13.46 (12.45, 14.54)	12.2 (11.16, 13.34)	48.18 (46.47, 49.91)	36.89 (35.7, 38.11)	32.44 (31.2, 33.71)	27.82 (26.91, 28.76)	21.08 (20.06, 22.15)
Normal weight		60.28 (55.93, 64.48)	60.8 (57.48, 64.02)	62.4 (58.97, 65.72)	66.43 (63.53, 69.2)	59.81 (56.54, 62.98)	49.84 (47.3, 52.37)	58.05 (55.85, 60.21)	61.86 (59.48, 64.18)	59.97 (58.06, 61.85)	61.91 (59.64, 64.13)
		55.78 (51.59, 59.89)	57.51 (54.44, 60.52)	56.31 (53.15, 59.41)	57.53 (54.77, 60.23)	51.95 (49.19, 54.7)	51.45 (48.72, 54.17)	59.71 (57.54, 61.85)	60.19 (57.82, 62.51)	61.03 (59.3, 62.73)	60.12 (58.05, 62.16)
		53.39 (43.32, 63.19)	50.67 (47.04, 54.3)	52.6 (49.17, 56)	51.3 (48.14, 54.45)	44.95 (41.78, 48.16)	39.23 (34.25, 44.44)	56.17 (53.61, 58.7)	57.42 (54.77, 60.02)	61.14 (59.16, 63.07)	59.66 (57.26, 62.01)
		19.96 (4.12, 59.13)	43.23 (37.44, 49.21)	50.28 (44.61, 55.94)	52.82 (48.04, 57.55)	45.45 (40.36, 50.64)	35.62 (20.55, 54.2)	50.06 (46.14, 53.98)	54.54 (50.29, 58.72)	55.41 (52.25, 58.52)	56.51 (52.71, 60.24)
		57.4 (54.54, 60.21)	55.43 (53.6, 57.24)	56.33 (54.52, 58.14)	57.89 (56.29, 59.47)	51.49 (49.82, 53.16)	49.17 (47.44, 50.9)	57.33 (56.08, 58.57)	59.43 (58.09, 60.75)	60.14 (59.13, 61.15)	60.11 (58.89, 61.32)
Overweight		5.82 (4.11, 8.17)	6.59 (5.15, 8.41)	8.67 (6.88, 10.86)	11.08 (9.32, 13.12)	15.63 (13.42, 18.13)	1.28 (0.82, 2.01)	2.91 (2.25, 3.75)	3.82 (2.96, 4.91)	5.34 (4.55, 6.25)	9.52 (8.33, 10.87)
		14.07 (11.39, 17.26)	17.65 (15.41, 20.15)	21.33 (18.84, 24.05)	24.61 (22.29, 27.09)	31.22 (28.7, 33.85)	2.95 (2.14, 4.05)	5 (4.13, 6.05)	9.64 (8.32, 11.15)	13.06 (11.92, 14.29)	19.1 (17.61, 20.68)
		13.61 (7.8, 22.66)	22.23 (19.39, 25.35)	25.93 (23.03, 29.06)	30.21 (27.36, 33.23)	33.2 (30.3, 36.23)	3.28 (1.86, 5.7)	7.67 (6.37, 9.21)	8.91 (7.5, 10.55)	12.01 (10.77, 13.37)	18.54 (16.79, 20.42)
		44.14 (12.09, 81.39)	21.23 (16.77, 26.51)	21.68 (17.25, 26.88)	24.62 (20.76, 28.93)	30.73 (26.28, 35.57)	3.4 (0.47, 20.56)	6.38 (4.69, 8.62)	7.07 (5.22, 9.52)	11.55 (9.72, 13.67)	17.18 (14.72, 19.95)
		10.57 (8.92, 12.47)	15.87 (14.59, 17.23)	19.18 (17.78, 20.66)	22.25 (20.93, 23.63)	27.56 (26.11, 29.06)	2.19 (1.73, 2.77)	5.1 (4.57, 5.69)	7.39 (6.71, 8.13)	10.39 (9.79, 11.03)	16.14 (15.3, 17.02)
Obese		1.13 (0.49, 2.59)	1.78 (1.05, 2.99)	1.51 (0.85, 2.66)	2.33 (1.58, 3.43)	3.55 (2.47, 5.07)	0.48 (0.23, 0.99)	0.12 (0.03, 0.39)	0.36 (0.15, 0.81)	0.66 (0.4, 1.08)	1.1 (0.75, 1.6)
		2.97 (1.81, 4.84)	3.9 (2.85, 5.32)	4.99 (3.83, 6.49)	6.61 (5.34, 8.16)	8.48 (6.98, 10.25)	0.51 (0.22, 1.13)	1.01 (0.63, 1.59)	0.95 (0.55, 1.64)	1.77 (1.37, 2.29)	2.95 (2.37, 3.67)
		4.56 (1.61, 12.27)	5.68 (4.25, 7.54)	7.27 (5.66, 9.28)	8.94 (7.26, 10.96)	12.46 (10.37, 14.9)	.	0.74 (0.4, 1.37)	0.72 (0.4, 1.29)	2.08 (1.59, 2.72)	3.81 (3.04, 4.76)
		.	5.25 (3.2, 8.51)	7.51 (4.96, 11.21)	9.98 (7.38, 13.36)	13.18 (10.08, 17.06)	.	0.99 (0.43, 2.26)	1.13 (0.49, 2.58)	2.61 (1.78, 3.81)	2.71 (1.88, 3.9)
		2.28 (1.54, 3.38)	3.85 (3.21, 4.61)	4.93 (4.2, 5.78)	6.38 (5.63, 7.23)	8.72 (7.79, 9.76)	0.43 (0.25, 0.74)	0.65 (0.47, 0.9)	0.72 (0.52, 1.01)	1.62 (1.38, 1.9)	2.64 (2.31, 3.03)

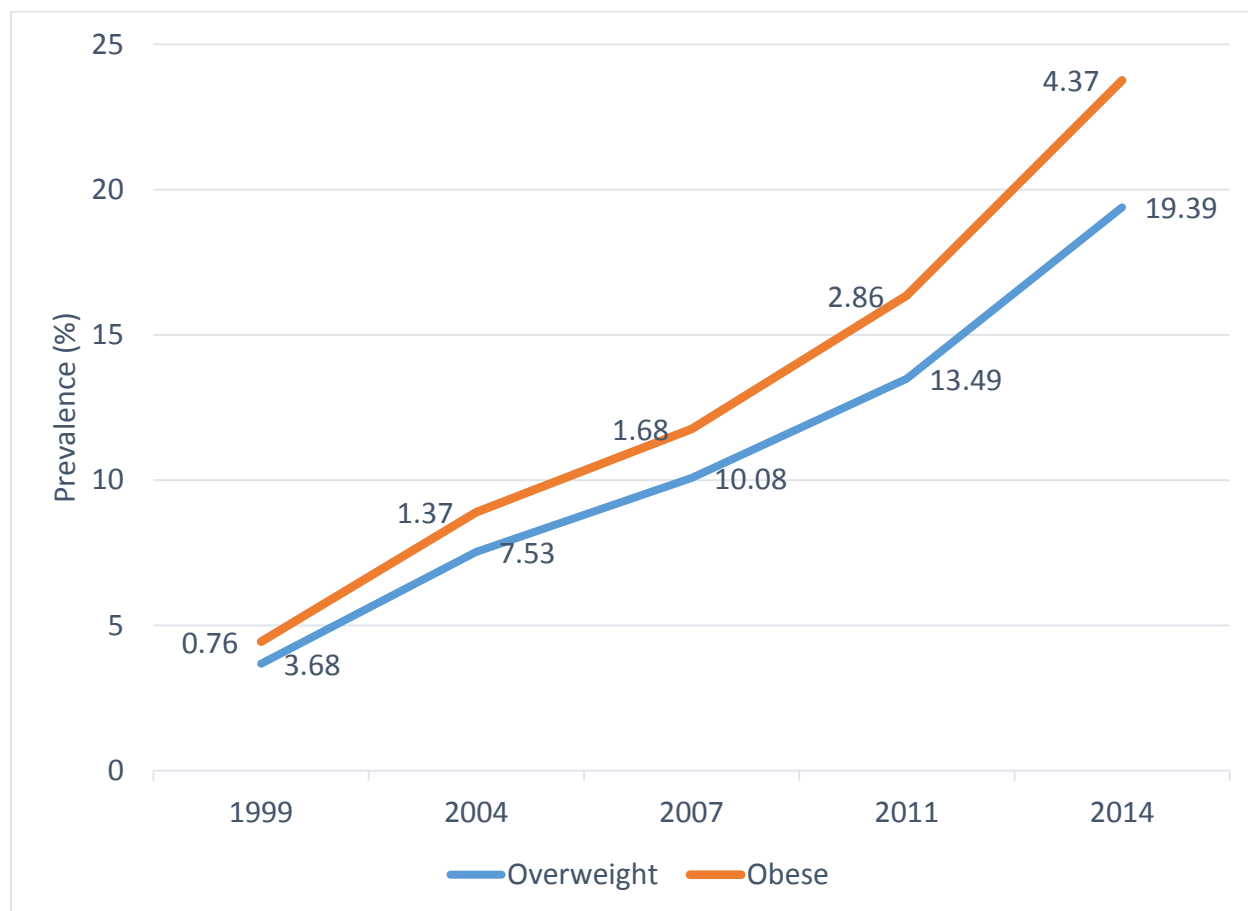
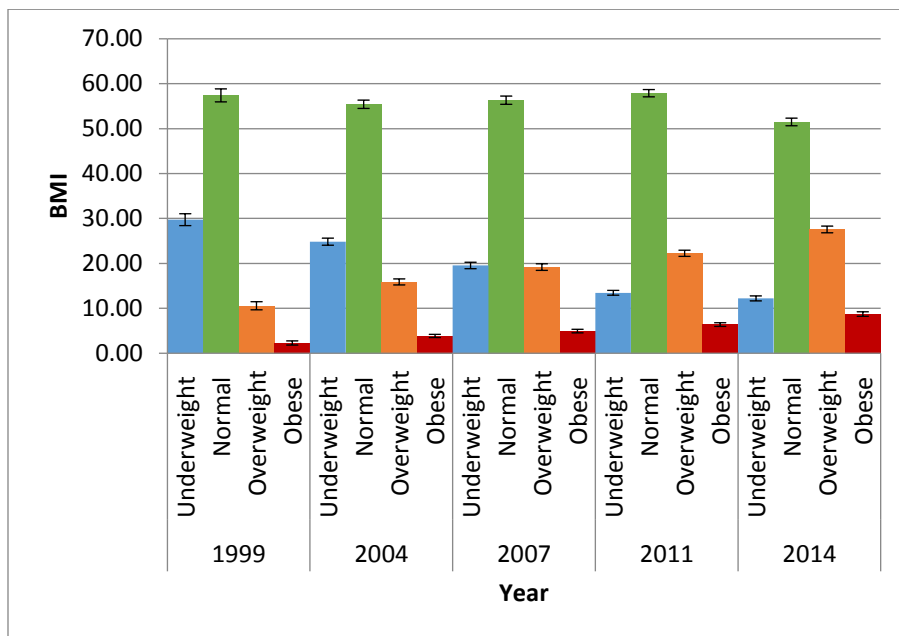
Figure S1. Prevalence of BMI categories International cutoff

Figure S2. Prevalence of underweight, normal, overweight, and obesity by year and place of residence BDHS 1999-2014 (International cutoff).

(a) Urban



(b) Rural

