

1 Supplementary Table 1. Comparison of baseline characteristics between respondents and non-respondents in the follow-up study.

Baseline characteristics	Participated or not							
	Normal		Primary snoring		Mild OSA		Moderate/severe OSA	
	No=152	Yes=98	No=54	Yes=49	No=124	Yes=75	No=46	Yes=21
Male, %	56%	52%	69%	59%	73%	68%	78%	76%
Age, years	10.1±1.8	9.9±1.8	9.5±1.8	9.3±1.8	10.4±1.8	9.9±1.8	9.8±1.7	9.7±1.9
BMI z-score, kg/m ²	0.28±1.16	0.30±1.03	0.69±0.96	0.49±0.85	0.69±1.12	0.65±1.00	1.08±0.96	0.80±1.12
Overweight/obese, %	28%	27%	37%	29%	44%	36%	63%	48%
Prepubertal, %	81%	85%	85%	96%	81%	87%	91%	90%
Allergic rhinitis, %	66%	72%	81%	86%	68%	81%	61%	62%
Asthma, %	7%	11%	6%	15%	11%	12%	9%	10%
Father's education, %								
Primary or below	14%	9%	8%	10%	18%	19%	9%	5%
Secondary	73%	73%	77%	63%	57%	63%	59%	76%
Tertiary or above	13%	18%	15%	27%	25%	18%	32%	19%
Mother's education, %								
Primary or below	17%	7%	13%	12%	18%	13%	4%	5%
Secondary	75%	82%	79%	69%	66%	72%	82%	90%
Tertiary or above	8%	11%	8%	18%	16%	15%	13%	5%
Monthly household income, %								
HKD 10,000 or below	29%	17%	17%	16%	28%	20%	20%	19%
HKD 10,001 – 15,000	21%	19%	30%	18%	18%	17%	16%	19%
HKD 15,001 or above	49%	63%	53%	65%	54%	63%	64%	62%
Habitual snoring, %	0%	0%	100%	100%	34%	31%	37%	43%

Mouth breathing during sleep, %	41%	42%	56%	59%	48%	49%	54%	62%
Tonsils \geq grade II, %	45%	37%	61%	51%	53%	52%	70%	75%
Adenoid \geq grade II, %	37%	33%	35%	29%	48%	35%	54%	42%
OAHl, events/h	0.2 (0–0.5)	0.1 (0–0.4)	0.1 (0–0.5)	0.2 (0–0.5)	2.1 (1.4–2.8)	1.9 (1.2–2.8)	8.2 (6.7–12.4)	7.5 (5.8–10.3)

BMI: body mass index; OAHl: obstructive apnea hypopnea index

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5 Supplementary table 2. Characteristics at baseline and 10-year follow-up by OSA categories at follow-up.

Subject characteristics	OSA categories at follow-up (n=243)				P for trend
	Normal n=155 (64%)	Primary snoring n=28 (12%)	Mild OSA n=40 (16%)	Moderate-to-severe OSA n=20 (8%)	
Male, %	57%	50%	68%	90%*	0.009
Age, years					
Baseline	9.6 ± 1.8	9.9 ± 1.9	10.2 ± 2.0	9.7 ± 1.3	0.23
Follow-up	20.1 ± 2.0	20.4 ± 2.0	20.4 ± 1.9	20.0 ± 1.6	0.55
Follow-up length, years	10.4 ± 1.1	10.6 ± 1.0	10.2 ± 1.2	10.3 ± 1.0	0.37
Prepubertal at baseline, %	88%	86%	88%	95%	0.55
BMI z-score, kg/m ²					
Baseline	0.38 ± 1.01	0.36 ± 0.94	0.78 ± 1.01	0.91 ± 0.79	0.005
Follow-up	0.13 ± 1.04	0.28 ± 1.14	0.47 ± 0.96	1.09 ± 1.00*	<0.001
Overweight, %					
Baseline	28%	21%	40%	55%*	0.016
Follow-up	15%	21%	23%	65%*	<0.001
Habitual snoring, %					
Baseline	26%	50%*	45%	40%	0.016
Follow-up	0%	100%*	40%*	45%*	<0.001
Mouth breathing during sleep, %					
Baseline	48%	57%	50%	50%	0.70
Follow-up	30%	75%*	43%	58%*	0.004
OAH, events/h [#]					
Baseline	0.3 (0–1.3)	0.8 (0.2–1.7)	1.1 (0.3–4.8)*	0.9 (0.3–3.0)	<0.001
Follow-up	0.6 (0–1.9)	0.9 (0.1–2.5)	7.5 (5.6–10.0)*	20.2 (18.2–25.4)*	<0.001
Baseline ambulatory BP^b					
SBP					
Daytime, mmHg	112 ± 9	111 ± 7	114 ± 8	116 ± 9*	0.028
Nighttime, mmHg	100 ± 9	99 ± 9	102 ± 10	100 ± 7	0.39
Nocturnal dipping, %	10.6 ± 5.5	10.8 ± 6.1	10.5 ± 6.2	13.6 ± 4.0	0.17
Non-dipper, n (%)	51 (44%)	10 (43%)	11 (37%)	2 (13%)*	0.046
DBP					
Daytime, mmHg	72 ± 6	71 ± 7	73 ± 5	74 ± 6	0.20
Nighttime, mmHg	59 ± 6	58 ± 6	59 ± 6	60 ± 4	0.88
Nocturnal dipping, %	17.3 ± 6.5	18.6 ± 6.8	18.5 ± 7.7	18.5 ± 5.9	0.29

Non-dipper, n (%)	14 (12%)	2 (9%)	5 (17%)	0 (0%)	0.55
Follow-up ambulatory BP^c					
SBP					
Daytime, mmHg	115 ± 9	113 ± 11	118 ± 9	124 ± 10*	<0.001
Nighttime, mmHg	103 ± 8	102 ± 11	107 ± 10	110 ± 9*	0.002
Nocturnal dipping, %	9.7 ± 5.1	9.7 ± 5.9	9.8 ± 5.6	10.7 ± 7.1	0.54
Non-dipper, n (%)	83 (54%)	16 (57%)	22 (55%)	11 (58%)	0.74
DBP					
Daytime, mmHg	72 ± 6	72 ± 8	73 ± 6	77 ± 6*	0.015
Nighttime, mmHg	62 ± 6	61 ± 7	63 ± 7	65 ± 6	0.067
Nocturnal dipping, %	14.2 ± 6.7	15.4 ± 6.2	14.3 ± 7.4	14.7 ± 6.8	0.76
Non-dipper, n (%)	41 (27%)	4 (14%)	9 (23%)	5 (26%)	0.62

6 *Significantly different from normal controls, $p < 0.05$ from post-hoc pairwise comparison by Tukey's, Games-Howell for continuous variables, or $p < 0.016$ from
 7 Mann-Whitney U test or chi-square tests with Bonferroni correction for non-normally distributed continuous and categorical data, respectively.

8 #Data were presented with median and interquartile range.

9 ^b59 missing

10 ^c2 missing

11 SBP: systolic blood pressure; DBP: diastolic blood pressure; OSA: obstructive sleep apnea; OAH: obstructive apnoea hypopnea index

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