

SUPPLEMENTARY MATERIALS

Supplementary Material 1. Crude weighted diabetes prevalence among Korean adults aged ≥30 years, 2007-2017

	2007-2009			2010-2012			2013-2015			2016-2017		
	n	%	(SE)	n	%	(SE)	n	%	(SE)	n	%	(SE)
Overall												
Unadjusted	2723116	100	(03)	2845113	102	(03)	3024909	112	(03)	4081084	127	(04)
Sex												
Men	1479051	11.0	(05)	1583843	11.5	(05)	1718103	13.0	(05)	2255053	14.1	(06)
Women	1244065	9.0	(04)	1261271	8.8	(04)	1306806	9.5	(04)	1826031	11.3	(05)
Age-group (years)												
30-39	205306	27	(03)	174982	24	(03)	163647	25	(04)	170050	24	(05)
40-49	505308	65	(05)	467584	61	(06)	512126	72	(06)	603290	73	(07)
50-59	714265	126	(07)	851290	132	(07)	766879	114	(07)	1150836	147	(09)
60-69	750880	212	(09)	708461	192	(08)	873188	224	(10)	1016621	207	(1.1)
≥70	547357	199	(10)	642796	223	(10)	709070	252	(12)	1140287	285	(13)
Income level ¹⁾												
Low	774897	173	(08)	822345	181	(09)	838513	207	(10)	1290084	256	(1.1)
Mid-low	721684	11.1	(07)	741766	9.7	(05)	857328	13.0	(07)	937200	123	(07)
Mid-high	561763	73	(05)	662164	84	(06)	653248	81	(06)	918150	98	(07)
High	558501	70	(05)	582904	7.6	(05)	659020	8.0	(05)	898070	9.0	(06)
BMI (kg/m ²) ²⁾												
<25.0	1323405	74	(03)	1481690	8.1	(03)	1562335	8.8	(04)	1867206	9.2	(04)
25.0-29.9	1171833	142	(06)	1132805	133	(06)	1161579	144	(07)	1755254	175	(08)
≥30.0	207210	20.4	(2.2)	221253	19.4	(1.9)	299315	23.5	(2.0)	442745	26.3	(2.1)

SE, standard error; BMI, body mass index,

¹⁾ Calculated as the monthly household income divided by the square root of the number of persons in the household, categorized into quartiles by year and gender.

²⁾ Calculated as the weight in kilograms divided by the height in meters squared.

Supplementary Material 2. Weighted prevalence of impaired fasting glucose among Korean adults aged ≥ 30 years, 2007-2017.

	2007-2009			2010-2012			2013-2015			2016-2017			<i>p</i> for trend ²⁾
	N	%	(SE)	n	%	(SE)	n	%	(SE)	N	%	(SE)	
Overall(years)													
≥ 30 (Unadjusted)	5525527	20.2	(0.5)	5724892	20.4	(0.5)	6908924	25.6	(0.5)	8453524	26.3	(0.6)	-
≥ 30 (Adjusted) ¹⁾	-	19.9	(0.5)	-	19.8	(0.5)	-	24.5	(0.5)	-	25.2	(0.6)	<0.001
30-39	1002555	13.1	(0.7)	891988	12.2	(0.8)	1126235	17.3	(1.0)	1228042	17.1	(1.0)	<0.001
40-49	1599552	20.6	(0.9)	1550971	20.2	(0.9)	1711604	24.2	(1.0)	2256811	27.5	(1.2)	<0.001
50-59	1399864	24.7	(1.0)	1596956	24.7	(0.9)	2142714	31.8	(1.0)	2297901	29.3	(1.1)	<0.001
60-69	883321	25.0	(1.0)	1026166	27.8	(1.0)	1179972	30.2	(1.1)	1545541	31.4	(1.2)	<0.001
≥ 70	640235	23.3	(1.1)	658812	22.8	(1.0)	748398	26.6	(1.2)	1125229	28.1	(1.3)	<0.001
Men(years)													
≥ 30 (Unadjusted)	3208532	23.8	(0.7)	3372956	24.5	(0.7)	4083283	30.9	(0.8)	5123122	32.1	(0.9)	-
≥ 30 (Adjusted) ¹⁾	-	23.7	(0.7)	-	24.0	(0.7)	-	30.0	(0.8)	-	31.3	(0.9)	<0.001
30-39	649603	16.5	(1.2)	609168	16.4	(1.3)	765859	23.2	(1.6)	847547	22.4	(1.5)	<0.001
40-49	1024141	25.9	(1.3)	1033719	26.3	(1.5)	1128813	32.0	(1.6)	1494469	36.0	(1.9)	<0.001
50-59	797261	27.9	(1.5)	930555	28.9	(1.5)	1237092	37.2	(1.6)	1452934	36.7	(1.8)	<0.001
60-69	448289	27.2	(1.5)	544071	31.0	(1.5)	599253	32.1	(1.5)	843311	35.1	(1.8)	0.001
≥ 70	289237	26.8	(1.8)	255443	22.3	(1.5)	352266	29.4	(1.8)	484861	29.4	(1.8)	0.052
Women(years)													
≥ 30 (Unadjusted)	2316995	16.7	(0.5)	2351936	16.5	(0.5)	2825642	20.5	(0.6)	3330402	20.5	(0.7)	-
≥ 30 (Adjusted) ¹⁾	-	16.2	(0.5)	-	15.5	(0.5)	-	19.0	(0.5)	-	19.0	(0.7)	<0.001
30-39	352952	9.5	(0.8)	282820	7.9	(0.8)	360377	11.3	(1.0)	380496	11.2	(1.1)	0.060
40-49	575411	15.1	(1.1)	517251	13.8	(1.0)	582791	16.4	(1.0)	762341	18.8	(1.3)	0.010
50-59	602603	21.5	(1.3)	666400	20.5	(1.1)	905623	26.5	(1.3)	844967	21.7	(1.3)	0.363
60-69	435032	23.0	(1.3)	482095	24.9	(1.5)	580719	28.5	(1.4)	702230	27.9	(1.5)	0.004
≥ 70	350997	21.1	(1.4)	403369	23.2	(1.3)	396133	24.6	(1.4)	640368	27.2	(1.8)	0.005

SE, standard error

¹⁾ Estimates are age-adjusted by direct standardization to the 2005 Korean census population.

²⁾ Derived using weighted logistic regression by including the midpoint of each survey period as a continuous variable.

Supplementary Material 3. Crude weighted proportion of diabetes awareness, treatment, and control among Korean adults with diabetes aged \geq 30 years, 2007-2017

	2007-2009		2010-2012		2013-2015		2016-2017	
	%	(SE)	%	(SE)	%	(SE)	%	(SE)
Awareness (diagnosed DM)								
Overall	726	(15)	727	(14)	705	(14)	723	(16)
Men	702	(21)	695	(21)	666	(21)	678	(21)
Women	755	(19)	767	(19)	755	(18)	778	(19)
Treatment (among prevalent DM)								
Overall	575	(15)	639	(15)	633	(15)	667	(16)
Men	536	(22)	608	(21)	591	(21)	624	(22)
Women	620	(21)	677	(21)	689	(18)	720	(21)
Control, A1C < 6.5% (among diagnosed DM)								
Overall	264	(16)	271	(16)	243	(14)	300	(17)
Men	281	(23)	255	(21)	242	(20)	287	(23)
Women	245	(19)	290	(24)	245	(21)	314	(23)
Control, A1C < 7% (among diagnosed DM)								
Overall	479	(18)	454	(18)	432	(17)	518	(18)
Men	490	(27)	445	(25)	438	(24)	504	(25)
Women	466	(25)	464	(24)	426	(25)	534	(25)
Control, Blood Pressure < 130/80 mmHg (among diagnosed DM)								
Overall	407	(18)	414	(16)	524	(17)	531	(19)
Men	388	(24)	411	(23)	494	(25)	511	(26)
Women	429	(23)	418	(24)	558	(23)	552	(26)
Control, Total Cholesterol < 200 mg/dL (among diagnosed DM)								
Overall	649	(18)	716	(15)	753	(15)	786	(14)
Men	719	(24)	753	(44)	777	(21)	807	(20)
Women	571	(24)	674	(24)	725	(22)	764	(21)

SE, standard error; DM, diabetes mellitus

Supplementary Material 4. Age-standardized weighted proportion of diabetes awareness, treatment, and control among Korean adults with diabetes aged ≥ 30 years, 2007-2017

	2007-2009		2010-2012		2013-2015		2016-2017		<i>p</i> for trend ²⁾
	%	(SE)	%	(SE)	%	(SE)	%	(SE)	
Awareness (diagnosed DM) ¹⁾									
Overall	72.4	(1.5)	71.2	(1.4)	68.2	(1.5)	69.2	(1.6)	0114
Men	71.7	(1.9)	69.3	(2.1)	66.2	(2.1)	66.4	(2.1)	0041
Women	73.3	(2.1)	73.4	(2.2)	71.6	(2.2)	72.7	(2.3)	0987
Treatment (among prevalent DM) ¹⁾									
Overall	57.2	(1.5)	62.2	(1.5)	60.8	(1.6)	63.5	(1.7)	0008
Men	55.0	(2.1)	60.3	(2.0)	58.5	(2.1)	61.1	(2.2)	0131
Women	59.7	(2.3)	64.6	(2.3)	64.7	(2.2)	66.3	(2.5)	0014
Control, A1C < 6.5% (among diagnosed DM) ¹⁾									
Overall	25.6	(1.7)	25.8	(1.8)	23.5	(1.7)	28.0	(1.8)	0314
Men	27.9	(2.3)	25.1	(2.4)	23.8	(2.2)	27.8	(2.5)	0981
Women	22.8	(2.2)	26.1	(2.6)	23.9	(2.4)	28.9	(2.3)	0109
Control, A1C < 7% (among diagnosed DM) ¹⁾									
Overall	46.6	(2.0)	44.4	(2.1)	40.4	(1.9)	48.9	(2.1)	0234
Men	48.2	(2.6)	44.3	(2.8)	41.6	(2.5)	48.1	(2.8)	0879
Women	45.5	(3.0)	42.8	(3.0)	40.1	(2.9)	50.6	(3.1)	0108
Control, Blood Pressure < 130/80 mmHg (among diagnosed DM) ¹⁾									
Overall	41.1	(1.9)	43.0	(1.9)	50.9	(2.0)	53.2	(2.2)	<0001
Men	38.6	(2.5)	41.8	(2.6)	46.2	(2.6)	49.5	(3.0)	<0001
Women	45.4	(2.7)	46.8	(2.8)	59.6	(2.8)	60.6	(3.0)	<0001
Control, Total Cholesterol < 200 mg/dl (among diagnosed DM) ¹⁾									
Overall	65.0	(1.8)	69.3	(1.9)	73.0	(1.9)	78.0	(1.7)	<0001
Men	71.8	(2.4)	72.8	(2.4)	75.8	(2.3)	80.4	(2.1)	0011
Women	59.3	(2.8)	64.6	(3.0)	69.4	(2.9)	74.8	(2.6)	<0001

DM, diabetes mellitus; SE, standard error

¹⁾ All estimates are age-standardized to the subpopulation of persons who had diabetes in the KNHANES 2005.

²⁾ Derived using weighted logistic regression by including the midpoint of each survey period as a continuous variable.