

Supplementary Materials: Association Between Socioeconomic Status and Digestive Tract Cancers: A Case-Control Study

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Table S1. Association between educational level and risk of subject cancers by site ¹.

Educational Level	Case	Control	Crude			Model 1			Model 2							
			Odds Ratio	(95% Conf. Interval)	<i>p</i> > <i>z</i>	Odds Ratio	(95% Conf. Interval)	<i>p</i> > <i>z</i>	Odds Ratio	(95% Conf. Interval)	<i>p</i> > <i>z</i>					
Stomach																
≤junior high school	122	83	1	Reference			1	Reference			1	Reference				
≤high school	339	278	0.81	0.57	1.17	0.262	0.82	0.57	1.18	0.287	0.78	0.53	1.15	0.213		
higher education	326	426	0.54	0.37	0.79	0.002	0.56	0.38	0.83	0.004	0.52	0.34	0.78	0.002		
trend <i>p</i> =						1.7 × 10 ⁻⁴	trend <i>p</i> =						0.001	trend <i>p</i> =		2.0 × 10 ⁻⁴

¹ Model 1 and Model 2 further adjusted for *H. pylori* and atrophic gastritis.

Table S2. Association between the quintiles of the areal deprivation index and risk of subject cancers by sites ¹.

Quintile of ADI	Case	Control	Crude			Model 1			Model 2							
			Odds Ratio	(95% Conf. Interval)	<i>p</i> > <i>z</i>	Odds Ratio	(95% Conf. Interval)	<i>p</i> > <i>z</i>	Odds Ratio	(95% Conf. Interval)	<i>p</i> > <i>z</i>					
Stomach																
Q1	123	161	1	Reference			1	Reference			1	Reference				
Q2	172	163	1.43	0.99	2.07	0.057	1.49	1.02	2.18	0.038	1.64	1.10	2.43	0.014		
Q3	165	160	1.23	0.85	1.77	0.269	1.25	0.86	1.81	0.243	1.28	0.87	1.89	0.211		
Q4	182	150	1.49	1.03	2.15	0.036	1.42	0.97	2.08	0.07	1.55	1.05	2.30	0.029		
Q5	151	159	1.20	0.83	1.74	0.327	1.20	0.82	1.74	0.348	1.27	0.86	1.88	0.224		
trend <i>p</i> =						0.392	trend <i>p</i> =						0.534	trend <i>p</i> =		0.39

¹ Model 1 and Model 2 further adjusted for *H. pylori* and atrophic gastritis.

Table S3. Association between educational level and risk of subject cancers by site stratified by age.

Educational Level	Model 2(<60 Years Old)						Model 2(≥60 Years Old)						Model 2					
	Case	Control	Odds Ratio	(95% Conf. Interval)	<i>p</i> > <i>z</i>		Case	Control	Odds Ratio	(95% Conf. Interval)	<i>p</i> > <i>z</i>	Case	Control	Odds Ratio	(95% Conf. Interval)	<i>p</i> > <i>z</i>		
Head and Neck																		
≤junior high school	19	15	1				104	53	1				123	68	1	Reference		
≤high school	100	77	1.87	0.78	4.51	0.161	128	138	0.54	0.34	0.85	0.009	228	215	0.67	0.43	1.03	0.069
higher education	134	167	1.12	0.47	2.64	0.798	98	130	0.47	0.29	0.77	0.003	232	297	0.43	0.27	0.68	3.2 × 10 ⁻⁴

					trend <i>p</i> =	0.157					trend <i>p</i> =	0.005				trend <i>p</i> =	1.4 × 10 ⁻⁴	
Esophagus																		
≤junior high school	13	3	1				1						103	67	1	Reference		
≤high school	70	58	0.24	0.03	1.99	0.184	90	64	0.63	0.38	1.04	0.070	193	175	0.63	0.35	1.13	0.121
higher education	74	103	0.13	0.02	1.08	0.059	123	117	0.64	0.39	1.06	0.081	202	254	0.64	0.36	1.15	0.137
					trend <i>p</i> =	0.023	128	151			trend <i>p</i> =	0.111				trend <i>p</i> =	0.172	
Stomach																		
≤junior high school	29	16	1				164	122	1				193	138	1	Reference		
≤high school	170	129	0.77	0.39	1.54	0.464	311	286	0.82	0.61	1.10	0.184	481	415	0.79	0.60	1.05	0.105
higher education	228	303	0.44	0.22	0.88	0.019	225	280	0.63	0.46	0.86	0.003	453	583	0.52	0.38	0.69	9.9 × 10 ⁻⁶
					trend <i>p</i> =	1.0 × 10 ⁻⁴					trend <i>p</i> =	0.003				trend <i>p</i> =	5.5 × 10 ⁻⁷	
Colorectum																		
≤junior high school	27	14	1				139	93	1				166	107	1	Reference		
≤high school	157	127	0.64	0.31	1.34	0.236	229	223	0.69	0.49	0.97	0.032	386	350	0.69	0.51	0.93	0.016
higher education	229	277	0.48	0.23	0.98	0.045	161	207	0.52	0.37	0.75	3.9 × 10 ⁻⁴	390	484	0.52	0.38	0.71	2.9 × 10 ⁻⁵
					trend <i>p</i> =	0.014					trend <i>p</i> =	4.1 × 10 ⁻⁴				trend <i>p</i> =	1.2 × 10 ⁻⁵	

Table S4. Association between the quintiles of the deprivation index and risk of subject cancers by sites ⁴.

Quintile of ADI	Case	Control	Crude ¹			Model 1 ²			Model 2 ³						
			Odds Ratio	(95% Conf. Interval)	<i>p</i> > <i>z</i>	Odds Ratio	(95% Conf. Interval)	<i>p</i> > <i>z</i>	Odds Ratio	(95% Conf. Interval)	<i>p</i> > <i>z</i>				
Head and Neck															
Q1	98	116	1	Reference		1	Reference		1	Reference					
Q2	108	115	1.13	0.76	1.68	0.541	1.34	0.86	2.08	0.192	1.28	0.80	2.07	0.302	
Q3	116	116	1.19	0.81	1.74	0.370	1.19	0.78	1.82	0.415	1.03	0.65	1.63	0.907	
Q4	136	117	1.40	0.96	2.04	0.083	1.62	1.07	2.47	0.024	1.60	1.01	2.52	0.043	
Q5	124	113	1.30	0.89	1.89	0.179	1.47	0.97	2.24	0.072	1.53	0.98	2.41	0.064	
						trend <i>p</i> =	0.12			trend <i>p</i> =	0.074			trend <i>p</i> =	0.050
Esophagus															
Q1	71	99	1	Reference		1	Reference		1	Reference					
Q2	67	100	0.93	0.60	1.45	0.761	0.74	0.40	1.36	0.336	0.72	0.36	1.43	0.352	
Q3	95	98	1.37	0.90	2.09	0.137	1.39	0.81	2.41	0.234	1.51	0.80	2.86	0.203	
Q4	128	99	1.81	1.20	2.71	0.005	1.26	0.74	2.15	0.404	1.23	0.67	2.27	0.504	
Q5	138	99	1.95	1.29	2.95	0.002	1.50	0.86	2.62	0.151	1.77	0.94	3.34	0.079	

		trend $p = 2.5 \times 10^{-5}$					trend $p = 0.032$					trend $p = 0.018$			
Stomach															
Q1	152	228	1	Reference			1	Reference			1	Reference			
Q2	238	228	1.56	1.18	2.06	0.002	1.61	1.20	2.14	0.001	1.73	1.28	2.33	3.3×10^{-4}	
Q3	241	227	1.56	1.19	2.05	0.001	1.60	1.21	2.12	0.001	1.64	1.23	2.20	0.001	
Q4	263	228	1.75	1.32	2.31	8.2×10^{-5}	1.66	1.25	2.22	0.001	1.74	1.29	2.34	2.7×10^{-4}	
Q5	232	227	1.53	1.16	2.03	0.003	1.54	1.16	2.06	0.003	1.61	1.20	2.17	0.002	
		trend $p = 0.003$					trend $p = 0.009$					trend $p = 0.007$			
Colorectum															
Q1	145	189	1	Reference			1	Reference			1	Reference			
Q2	180	190	1.23	0.91	1.66	0.172	1.13	0.83	1.54	0.432	1.12	0.82	1.54	0.472	
Q3	212	187	1.47	1.10	1.96	0.01	1.40	1.04	1.88	0.027	1.37	1.01	1.86	0.044	
Q4	233	189	1.60	1.20	2.14	0.001	1.51	1.12	2.03	0.007	1.43	1.05	1.95	0.024	
Q5	175	188	1.21	0.90	1.62	0.217	1.09	0.80	1.48	0.584	1.02	0.75	1.41	0.880	
		trend $p = 0.075$					trend $p = 0.209$					trend $p = 0.463$			

¹ Crude model considering matching factors (age and sex) in the conditional logistic regression model. ² Model 1 further adjusted for alcohol intake, PY of smoking, and family history of subject cancer. ³ Model 2 further adjusted for BMI, past history of diabetes, physical activity (metabolic equivalent (MET)-per week), vegetable/fruit intake, beef/pork intake, and processed meat intake. ⁴ Some cases were excluded, because the areal deprivation index was unknown or unstable (13 cases of head and neck cancer, 8 cases of esophageal cancer, 23 cases of stomach cancer, and 15 cases of colorectal cancer were excluded).

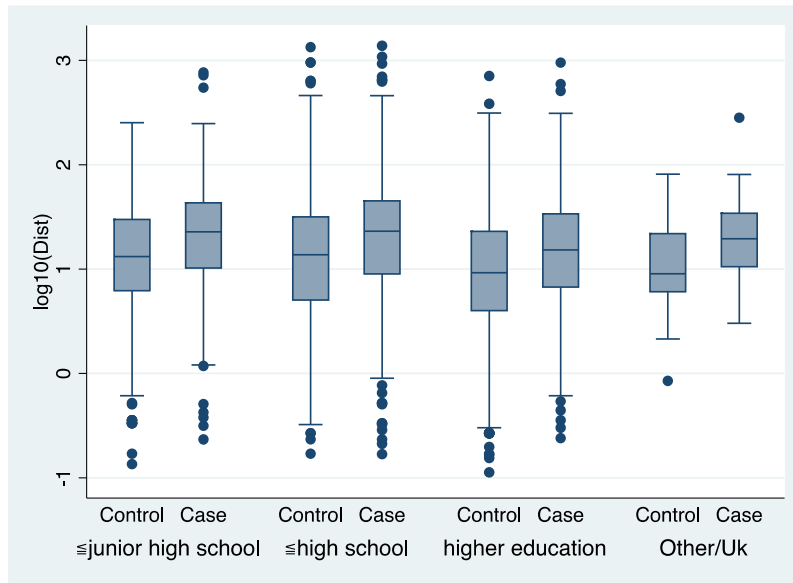


Figure S1. The physical distances between the residential addresses and our hospital by education level.

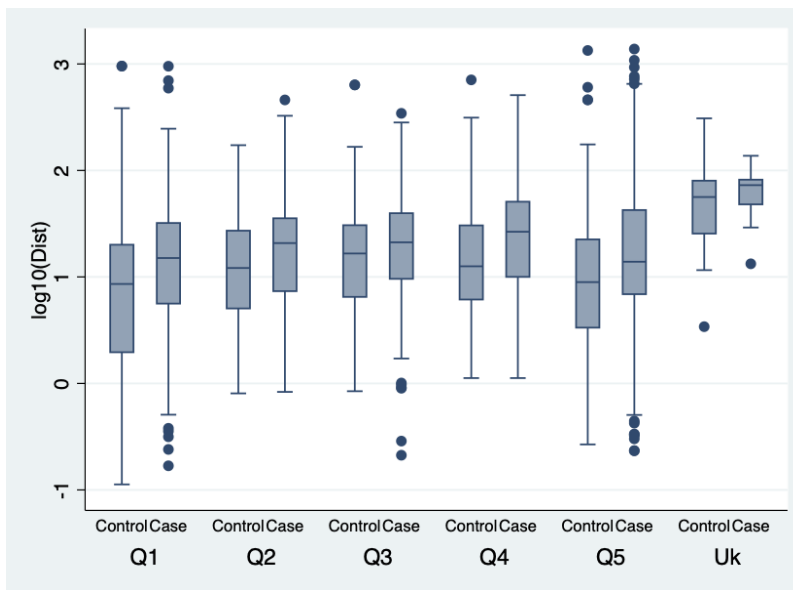


Figure S2. The physical distances between the residential addresses and our hospital by areal deprivation index.

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