

Supplementary materials

Supplementary Table S1. The incident cases and age-standardized incidence of GBTC in 1990 and 2019, and its temporal trends from 1990 to 2019

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Supplementary Figure S1. The trend of the number of incident cases (A), prevalent cases (B), deaths (C), and DALYs (D) due to gallbladder and biliary tract cancer by age from 1990 to 2019.

Supplementary Figure S2. The correlation between ASR and HDI in 2019. (A) The age-standardized incidence positively associated with the HDI; (B) The age-standardized prevalence positively associated with the HDI; (C) The age-standardized mortality positively associated with the HDI; (D) The age-standardized rate of DALYs positively associated with the HDI when HDI score was limited to below 0.82, whereas a significant negative association was found for a HDI

score above 0.82. The circles represent countries that were available on HDI data. The size of each circle is proportional to the number of incident cases, prevalent cases, deaths, and DALYs, respectively. The ρ indices and p values were derived from Pearson correlation analysis. ASR, age-standardized rate; GBTC, Gallbladder and biliary tract cancer

Supplementary Figure S3. The risk factors of gallbladder and biliary tract cancer.

Supplementary Table S1. The incident cases and age-standardized incidence of GBTC in 1990 and 2019, and its temporal trends from 1990 to 2019

Characteristics	1990		2019		1990~2019
	Incident case No. ×10 ³ (95% UI)	ASR per 100,000 No. (95% UI)	Incident case No. ×10 ³ (95% UI)	ASR per 100,000 No. (95% UI)	EAPC No. (95% CI)
Overall	107.8 (96.9-119.9)	2.9 (2.6-3.2)	199.2 (166.8-219.6)	2.5 (2.1-2.7)	−0.48 (−0.55−0.4)
Sex					
Male	40.4 (36.4-45.4)	2.5(2.2-2.7)	86.4 (69.4-95.9)	2.4 (1.9-2.7)	0.04 (−0.06-0.15)
Female	67.4 (57.8-78.7)	3.3 (2.8-3.8)	112.8 (9.2-13.0)	2.6 (2.1-3.0)	−0.82 (−0.87−0.76)
Socio-demographic index					
High	44.9 (36.4-47.0)	4.2 (3.4-4.4)	63.8 (52.1-72.3)	3.2 (2.6-3.6)	−1.09 (−1.14−1.03)
High -middle	29.9 (26.7-32.4)	2.9 (2.6-3.2)	50.8 (37.7-57.5)	2.5 (1.9-2.8)	−0.48 (−0.6−0.36)
Middle	18.3 (16.4-23.9)	1.9 (1.7-2.5)	45.8 (39.6-53.4)	1.9 (1.7-2.2)	0.23 (0.11-0.34)
Low-middle	10.9 (9.1-15.6)	1.9 (1.6-2.7)	29.6 (26.0 -33.9)	2.2 (2-2.6)	0.58 (0.51-0.66)
Low	3.7 (2.9-4.8)	1.6 (1.3-2.2)	9.1 (7.7-10.5)	1.9 (1.6-2.1)	0.54 (0.45-0.64)
Region					
High-income Asia Pacific	18.1 (14.8-19.1)	9.3 (7.6-9.9)	32.8 (24.2-38.6)	6.4 (4.9-7.4)	−1.45 (−1.49−1.41)
Central Asia	0.5 (0.4-0.6)	1.1 (0.9-1.3)	0.7 (0.6-0.9)	1.1 (0.9-1.3)	−0.09 (−0.2-0.02)
East Asia	13.3 (11.1-21.1)	1.6 (1.4-2.6)	40.5 (29.2-48.5)	2 (1.5-2.4)	1.44 (1.02-1.86)
South Asia	10.7 (8.9-15.2)	2 (1.7-2.9)	35.7 (28.0-40.9)	2.6 (2.1-3)	0.96 (0.81-1.11)
Southeast Asia	4.5 (3.6-5.2)	1.9 (1.5-2.2)	11.4 (9.1-13.9)	2 (1.6-2.4)	0.18 (0.08-0.28)
Australasia	0.6 (0.5-0.7)	2.4 (2.2-2.8)	0.9 (0.7-1.1)	1.8 (1.4-2.1)	−1.19 (−1.26−1.12)
Caribbean	0.8 (0.5-0.9)	3.2 (2-3.5)	0.9 (0.7-1.1)	1.7 (1.4-2.1)	−2.41 (−2.92−1.9)
Central Europe	6.7 (5.7-7.2)	4.6 (3.9-4.9)	6.4 (5.4-7.4)	2.9 (2.5-3.4)	−1.71 (−1.76−1.66)
Eastern Europe	4.7 (3.9-5.1)	1.7 (1.4-1.9)	5.1 (4.3-5.9)	1.5 (1.3-1.7)	−0.77 (−0.96−0.57)
Western Europe	22.4 (17.7-23.7)	3.8 (3-4)	23.5 (19.3-27.4)	2.4 (2-2.8)	−1.63 (−1.71−1.56)
Andean Latin America	1.1 (0.9-1.2)	5.5 (4.6-6.2)	2.5 (2.0-3.2)	4.6 (3.6-5.8)	−0.68 (−0.8−0.56)
Central Latin America	3.5 (2.7-3.7)	4.4 (3.3-4.7)	5.9 (4.9-7.8)	2.5 (2.1-3.3)	−2.27 (−2.42−2.12)
Southern Latin America	4.4 (3.5-4.7)	9.6 (7.6-10.3)	5.3 (4.1-7.1)	6.3 (4.9-8.4)	−1.62 (−1.69−1.55)

Tropical Latin America	3.1 (2.6-3.4)	3.6 (3-3.9)	5.7 (4.9-6.6)	2.4 (2.1-2.8)	-1.41 (-1.48--1.33)
North Africa and Middle East	3.1 (2.5-3.8)	1.9 (1.5-2.4)	6.9 (6.0-8.3)	1.7 (1.5-2.1)	-0.39 (-0.43--0.36)
High-income North America	7.9 (6.6-8.4)	2.2 (1.8-2.3)	10.7 (9.1-13.1)	1.7 (1.4-2.1)	-0.97 (-1.02--0.93)
Oceania	0.03 (0.02-0.04)	1.1 (0.9-1.3)	0.07 (0.05-0.09)	1 (0.8-1.3)	-0.28 (-0.31--0.25)
Central Sub-Saharan Africa	0.2 (0.2-0.3)	1.2 (0.9-1.5)	0.5 (0.4-0.7)	1 (0.8-1.4)	-0.48 (-0.53--0.42)
Eastern Sub-Saharan Africa	1.0 (0.8-1.2)	1.3 (1.1-1.6)	1.8 (1.5-2.2)	1.2 (1-1.5)	-0.33 (-0.38--0.29)
Southern Sub-Saharan Africa	0.2 (0.2-0.3)	0.9 (0.8-1.1)	0.5 (0.4-0.6)	0.9 (0.8-1)	-0.04 (-0.26-0.18)
Western Sub-Saharan Africa	0.9 (0.7-1.2)	1.1 (0.9-1.4)	1.6 (1.3-2.4)	1 (0.8-1.4)	-0.34 (-0.42--0.26)

Supplementary Table S2. The prevalent cases and age-standardized prevalence of GBTC in 1990 and 2019, and its temporal trends from 1990 to 2019

Characteristics	1990		2019		1990~2019
	Prevalent case No. ×10 ³ (95% UI)	ASR per 100,000 No. (95% UI)	Prevalent case No. ×10 ³ (95% UI)	ASR per 100,000 No. (95% UI)	EAPC No. (95% CI)
Overall	133.7 (119.8-147.0)	3.5 (3.1-3.8)	256.3 (215.7-282.0)	3.2 (2.7-3.5)	−0.27 (−0.35−0.19)
Sex					
Male	52.17 (46.68-57.43)	3.05 (2.69-3.30)	116.41 (94.57-129.14)	3.16 (2.55-3.50)	0.28 (0.16-0.40)
Female	81.56 (69.20-93.44)	3.88 (3.28-4.45)	139.93 (113.47-160.86)	3.20 (2.62-3.68)	−0.66 (−0.72−0.60)
Socio-demographic index					
High	62.0 (50.5-65.0)	5.9 (4.8-6.2)	94.6 (79.1-107.4)	4.8 (4.1-5.5)	−0.67 (−0.74−0.6)
High -middle	35.5 (31.3-38.1)	3.4 (3-3.6)	64.7 (47.4-73.5)	3.2 (2.3-3.6)	−0.13 (−0.25-0)
Middle	20.4 (18.3-26.4)	2 (1.8-2.6)	54.2 (46.7-62.7)	2.2 (1.9-2.6)	0.53 (0.41-0.64)
Low-middle	11.8 (9.9-17.0)	2 (1.7-2.8)	32.8 (28.7-37.6)	2.4 (2.1-2.7)	0.74 (0.67-0.8)
Low	3.9 (3.1-5.2)	1.6 (1.3-2.2)	9.9 (8.3-11.4)	1.9 (1.6-2.2)	0.67 (0.58-0.76)
Region					
High-income Asia Pacific	23.1 (18.8-24.5)	11.7 (9.5-12.4)	43.6 (32.6-52.0)	8.9 (7-10.5)	−0.97 (−1.03−0.9)
Central Asia	0.6 (0.5-0.6)	1.2 (1-1.4)	0.8 (0.7-1.0)	1.1 (0.9-1.3)	−0.14 (−0.24−0.03)
East Asia	14.8 (12.3-23.2)	1.7 (1.4-2.7)	49.8 (35.1-59.8)	2.4 (1.7-2.9)	1.96 (1.53-2.39)
South Asia	11.7 (9.6-16.6)	2.1 (1.7-2.9)	39.5 (30.9-45.4)	2.8 (2.2-3.2)	1.15 (1.01-1.28)
Southeast Asia	5.1 (4.1-5.9)	2 (1.6-2.3)	14.0 (10.9-17.2)	2.3 (1.8-2.9)	0.56 (0.46-0.65)
Australasia	0.8 (0.7-0.9)	3.4 (3-3.9)	1.4 (1.1-1.7)	2.7 (2.2-3.3)	−0.73 (−0.82−0.65)
Caribbean	0.9 (0.6-1.0)	3.5 (2.2-3.9)	1.0 (0.8-1.2)	1.9 (1.6-2.4)	−2.31 (−2.82−1.79)
Central Europe	7.4 (6.3-7.9)	5 (4.3-5.3)	7.3 (6.2-8.5)	3.4 (2.9-4)	−1.44 (−1.48−1.39)
Eastern Europe	5.6 (4.6-6.0)	2 (1.7-2.2)	6.6 (5.6-7.6)	1.9 (1.6-2.2)	−0.31 (−0.45−0.17)
Western Europe	31.0 (24.6-32.9)	5.3 (4.2-5.6)	36.4 (30.1-42.4)	4 (3.3-4.6)	−1.07 (−1.13−1.01)
Andean Latin America	1.2 (1.0-1.4)	5.9 (4.9-6.6)	3.0 (2.3-3.8)	5.4 (4.2-6.9)	−0.36 (−0.47−0.24)
Central Latin America	4.0 (3.0-4.2)	4.8 (3.6-5.1)	6.9 (5.7-9.0)	2.9 (2.4-3.8)	−2.08 (−2.23−1.92)
Southern Latin America	5.0 (4.0-5.3)	10.8 (8.6-11.6)	6.4 (5.0-8.5)	7.8 (6-10.3)	−1.31 (−1.38−1.24)

Tropical Latin America	3.5 (2.9-3.8)	3.9 (3.2-4.2)	6.6 (5.7-7.6)	2.7 (2.4-3.1)	−1.21 (−1.28−−1.13)
North Africa and Middle East	3.5 (2.8-4.3)	2 (1.6-2.5)	8.2 (7.1-10.0)	1.9 (1.7-2.4)	−0.17 (−0.21−−0.13)
High-income North America	13.3 (11.1-14.0)	3.7 (3.1-3.9)	20.0 (17.1-24.2)	3.2 (2.8-3.9)	−0.55 (−0.61−−0.48)
Oceania	0.03 (0.03-0.04)	1.1 (0.9-1.4)	0.08 (0.06-0.10)	1.1 (0.8-1.4)	−0.17 (−0.2−−0.14)
Central Sub-Saharan Africa	0.3 (0.2-0.3)	1.2 (0.9-1.5)	0.5 (0.4-0.7)	1 (0.8-1.4)	−0.40 (−0.47−−0.33)
Eastern Sub-Saharan Africa	1.0 (0.8-1.2)	1.3 (1.1-1.6)	2.0 (1.6-2.4)	1.2 (1-1.5)	−0.23 (−0.29−−0.16)
Southern Sub-Saharan Africa	0.3 (0.2-0.3)	1 (0.8-1.2)	0.5 (0.5-0.6)	1 (0.8-1.1)	−0.03 (−0.2-0.13)
Western Sub-Saharan Africa	0.9 (0.8-1.2)	1.1 (0.9-1.4)	1.7 (1.4-2.6)	1 (0.8-1.4)	−0.27 (−0.37−−0.17)

Supplementary Table S3. The number of death and age-standardized mortality rate of GBTC in 1990 and 2019, and its temporal trends from 1990 to 2019

Characteristics	1990		2019		1990~2019
	Deaths No. ×10 ³ (95% UI)	ASR per 100,000 No. (95% UI)	Deaths No. ×10 ³ (95% UI)	ASR per 100,000 No. (95% UI)	EAPC No. (95% CI)
Overall	94.86 (85.14-107.24)	2.6 (2.3-2.9)	172.44 (144.90-188.62)	2.2 (1.8-2.4)	−0.58 (−0.65−0.51)
Sex					
Male	34.83 (30.88-40.06)	2.2 (1.9-2.5)	73.00 (59.48-80.40)	2.1 (1.7-2.3)	−0.07 (−0.17-0.04)
Female	60.02 (51.25-70.18)	2.9 (2.5-3.4)	99.45 (81.73-114.00)	2.3 (1.9-2.6)	−0.86 (−0.97−0.75)
Socio-demographic index					
High	35.59 (28.73-37.29)	3.4 (2.7-3.5)	48.41 (38.29-53.44)	2.3 (1.9-2.5)	−1.38 (−1.44−1.33)
High -middle	27.26 (24.42-29.59)	2.7 (2.4-3.0)	44.04 (33.51-49.35)	2.2 (1.7-2.4)	−0.73 (−0.86−0.6)
Middle	17.67 (15.79-23.07)	1.9 (1.7-2.5)	42.30 (36.87-49.24)	1.8 (1.6-2.1)	0 (−0.11-0.12)
Low-middle	10.65 (8.95-15.39)	2 (1.7-2.8)	28.68 (25.26-33.09)	2.2 (2-2.6)	0.49 (0.4-0.58)
Low	3.64 (2.92-4.83)	1.7 (1.4-2.3)	8.95 (7.45-10.26)	1.9 (1.6-2.2)	0.49 (0.39-0.59)
Region					
High-income Asia Pacific	15.45 (12.65-16.28)	8 (6.6-8.5)	27.13 (19.58-30.77)	5.1 (3.8-5.7)	−1.79 (−1.84−1.74)
Central Asia	0.48 (0.41-0.57)	1.1 (0.9-1.3)	0.71 (0.59-0.83)	1.1 (0.9-1.2)	−0.03 (−0.15-0.09)
East Asia	12.80 (10.62-20.45)	1.6 (1.4-2.6)	36.03 (26.79-42.82)	1.8 (1.4-2.2)	1 (0.59-1.41)
South Asia	10.47 (8.60-14.96)	2.1 (1.7-3)	34.54 (26.64-39.59)	2.6 (2-3)	0.84 (0.68-1.01)
Southeast Asia	4.34 (3.49-5.03)	1.9 (1.5-2.2)	10.25 (8.30-12.44)	1.9 (1.5-2.3)	−0.09 (−0.19-0.02)
Australasia	0.44 (0.39-0.51)	1.9 (1.7-2.2)	0.65 (0.54-0.74)	1.3 (1-1.4)	−1.5 (−1.57−1.44)
Caribbean	0.77 (0.49-0.86)	3 (1.9-3.4)	0.81 (0.68-1.01)	1.6 (1.3-2)	−2.46 (−2.96−1.95)
Central Europe	6.48 (5.52-6.94)	4.5 (3.8-4.8)	6.10 (5.24-7.13)	2.8 (2.4-3.2)	−1.83 (−1.89−1.78)
Eastern Europe	4.15 (3.49-4.59)	1.5 (1.3-1.7)	4.24 (3.53-4.90)	1.2 (1-1.4)	−1.12 (−1.34−0.89)
Western Europe	17.60 (13.81-18.49)	3 (2.3-3.1)	16.99 (14.15-19.08)	1.7 (1.4-1.9)	−2.04 (−2.13−1.95)
Andean Latin America	1.06 (0.89-1.20)	5.4 (4.6-6.2)	2.32 (1.83-2.93)	4.2 (3.3-5.4)	−0.92 (−1.05−0.8)
Central Latin America	3.37 (2.56-3.57)	4.3 (3.3-4.6)	5.50 (4.65-7.36)	2.4 (2-3.2)	−2.39 (−2.53−2.24)
Southern Latin America	4.08 (3.24-4.35)	9.1 (7.2-9.7)	4.77 (4.30-6.22)	5.7 (5.1-7.4)	−1.84 (−1.91−1.77)

Tropical Latin America	2.96 (2.46-3.21)	3.5 (2.9-3.8)	5.40 (4.69-6.30)	2.3 (2-2.7)	−1.52 (−1.6−−1.45)
North Africa and Middle East	2.96 (2.39-3.70)	1.9 (1.5-2.4)	6.27 (5.47-7.71)	1.6 (1.4-2)	−0.56 (−0.6−−0.53)
High-income North America	5.11 (4.25-5.44)	1.4 (1.2-1.5)	6.25 (5.60-7.57)	1 (0.9-1.2)	−1.37 (−1.43−−1.31)
Oceania	0.03 (0.02-0.04)	1.1 (0.9-1.4)	0.06 (0.05-0.08)	1 (0.8-1.3)	−0.36 (−0.4−−0.33)
Central Sub-Saharan Africa	0.25 (0.19-0.31)	1.2 (1-1.5)	0.49 (0.36-0.67)	1.1 (0.8-1.4)	−0.5 (−0.54−−0.45)
Eastern Sub-Saharan Africa	0.95 (0.75-1.18)	1.4 (1.1-1.7)	1.84 (1.51-2.22)	1.3 (1-1.5)	−0.23 (−0.27−−0.19)
Southern Sub-Saharan Africa	0.24 (0.21-0.29)	1 (0.8-1.1)	0.48 (0.40-0.55)	0.9 (0.8-1.1)	−0.01 (−0.24-0.22)
Western Sub-Saharan Africa	0.90 (0.74-1.18)	1.2 (1-1.5)	1.64 (1.35-2.41)	1 (0.8-1.5)	−0.36 (−0.43−−0.28)

Supplementary Table S4. The number and age-standardized rate of DALYs due to GBTC in 1990 and 2019, and its temporal trends from 1990 to 2019

Characteristics	1990		2019		1990~2019
	DALYs No. ×10 ³ (95% UI)	ASR per 100,000 No. (95% UI)	DALYs No. ×10 ³ (95% UI)	ASR per 100,000 No. (95% UI)	EAPC No. (95% CI)
Overall	2153.57 (1933.11-2455.89)	54.1 (48.7-61.3)	3621.47 (3102.42-3969.07)	44 (37.6-48.2)	−0.67 (−0.74−0.61)
Sex					
Male	834.09 (744.53-961.35)	45.26 (40.17-52.26)	1579.00 (1301.03-1756.59)	41.02 (33.68-45.29)	−0.20 (−0.31−0.10)
Female	1319.48 (1124.24-1538.82)	61.78 (52.66-72.27)	2042.47 (1688.64-2354.41)	46.83 (38.70-53.98)	−0.94 (−1.05−0.83)
Socio-demographic index					
High	711.08 (583.11-740.63)	68.7 (56.5-71.6)	787.80 (665.13-866.23)	42.1 (36.3-46.7)	−1.85 (−1.91−1.8)
High -middle	619.22 (550.01-662.65)	57.5 (51.2-61.8)	920.02 (690.25-1035.01)	45.1 (33.9-50.8)	−0.79 (−0.92−0.66)
Middle	447.64 (400.26-581.27)	42 (37.6-54.6)	976.54 (853.01-1140.02)	38.4 (33.6-44.7)	−0.1 (−0.21-0.01)
Low-middle	277.85 (231.75-404.84)	44.4 (37.3-64.4)	706.87 (613.06-809.04)	50.1 (43.6-57.3)	0.52 (0.43-0.6)
Low	96.63 (75.79-128.77)	38.8 (30.8-51.4)	228.77 (187.59-263.49)	42.3 (35.1-48.6)	0.41 (0.3-0.52)
Region					
High-income Asia Pacific	318.74 (260.44-334.87)	157.6 (129.1-165.7)	398.51 (311.25-441.61)	88.4 (74.2-98.3)	−2.24 (−2.3−2.17)
Central Asia	11.69 (10.04-13.50)	24.6 (21-28.6)	17.85 (14.54-20.73)	23.4 (19.3-27.2)	−0.23 (−0.35−0.1)
East Asia	327.93 (271.27-517.93)	35.9 (29.9-56.9)	798.90 (604.40-955.61)	38.1 (28.7-45.5)	0.82 (0.42-1.22)
South Asia	279.90 (229.32-400.38)	46.9 (38.5-67)	865.13 (658.25-992.59)	59.3 (45.4-68)	0.92 (0.77-1.07)
Southeast Asia	110.51 (88.42-128.61)	41.6 (33.4-48.4)	238.94 (192.00-289.27)	38.7 (31.2-46.8)	−0.31 (−0.4−0.21)
Australasia	9.06 (8.02-10.43)	38.7 (34.2-44.5)	11.63 (9.83-13.18)	24.3 (20.7-27.5)	−1.68 (−1.74−1.62)
Caribbean	17.94 (11.35-20.22)	67.9 (43.2-76.5)	18.73 (15.35-23.43)	36.2 (29.7-45.2)	−2.35 (−2.86−1.84)
Central Europe	140.43 (119.44-149.41)	94.3 (80.4-100.5)	118.88 (102.19-139.38)	56.7 (48.7-66.1)	−1.88 (−1.92−1.84)
Eastern Europe	94.92 (78.31-103.25)	33.5 (27.7-36.6)	91.66 (77.01-105.84)	27.1 (22.8-31.3)	−1.17 (−1.43−0.91)
Western Europe	334.62 (263.40-349.47)	58.5 (46.1-61.1)	282.85 (240.41-324.01)	32.3 (27.9-37.5)	−2.2 (−2.28−2.12)
Andean Latin America	25.75 (21.57-29.40)	122 (102.6-138.9)	50.54 (39.37-64.54)	89.8 (69.9-114.1)	−1.14 (−1.27−1.01)
Central Latin America	81.95 (62.22-86.61)	95.2 (72.4-100.7)	123.23 (104.06-164.75)	51.6 (43.6-69.1)	−2.45 (−2.61−2.29)
Southern Latin America	91.43 (72.47-97.21)	197 (156.1-209.7)	99.48 (90.62-125.64)	121.3 (110.8-152.7)	−1.86 (−1.93−1.79)

Tropical Latin America	72.54 (61.32-79.79)	77 (64.5-84.1)	121.49 (106.80-139.52)	49.4 (43.4-56.9)	−1.53 (−1.6−−1.46)
North Africa and Middle East	75.86 (60.84-91.66)	42.3 (34-52.2)	152.33 (129.01-180.64)	33.9 (29.4-40.9)	−0.78 (−0.81−−0.75)
High-income North America	100.30 (85.53-107.23)	29 (24.7-31)	119.33 (109.84-142.83)	19.7 (18.2-23.6)	−1.4 (−1.46−−1.33)
Oceania	0.79 (0.61-0.99)	25.1 (19.5-30.7)	1.71 (1.24-2.27)	22.7 (16.8-29.3)	−0.33 (−0.36−−0.3)
Central Sub-Saharan Africa	6.60 (4.81-8.60)	27.5 (20.8-35)	13.08 (9.60-17.92)	23.3 (17.2-31.5)	−0.55 (−0.59−−0.51)
Eastern Sub-Saharan Africa	25.42 (19.59-31.79)	31.8 (24.9-39.5)	46.65 (37.85-57.00)	27.5 (22.7-33.5)	−0.52 (−0.56−−0.48)
Southern Sub-Saharan Africa	5.96 (5.22-6.89)	20.8 (18-24.4)	11.41 (9.69-13.19)	19.7 (16.7-22.8)	−0.02 (−0.24-0.19)
Western Sub-Saharan Africa	21.26 (17.31-27.62)	24.2 (19.8-31.6)	39.17 (31.74-56.66)	20.8 (17.1-30.6)	−0.42 (−0.5−−0.35)

Supplementary Table S5. The number and age-standardized rate of YLDs due to GBTC in 1990 and 2019, and its temporal trends from 1990 to 2019

Characteristics	1990		2019		1990~2019
	YLDs No. ×10 ³ (95% UI)	ASR per 100,000 No. (95% UI)	YLDs No. ×10 ³ (95% UI)	ASR per 100,000 No. (95% UI)	EAPC No. (95% CI)
Overall	25.85 (18.46-33.87)	0.7 (0.5-0.9)	48.44 (33.77-64.79)	0.6 (0.4-0.8)	−0.39 (−0.47−−0.32)
Sex					
Male	9.93 (7.05-13.06)	0.59 (0.42-0.78)	21.40 (14.45-28.55)	0.59 (0.42-0.78)	0.10 (−0.01-0.21)
Female	15.91 (10.98-21.24)	0.76 (0.53-1.02)	27.04 (18.54-36.34)	0.62 (0.42-0.83)	−0.73 (−0.79−−0.67)
Socio-demographic index					
High	10.83 (7.61-14.15)	1 (0.7-1.3)	15.54 (10.66-20.83)	0.8 (0.5-1)	−0.98 (−1.04−−0.93)
High -middle	7.13 (5.04-9.38)	0.7 (0.5-0.9)	12.39 (8.03-16.78)	0.6 (0.4-0.8)	−0.35 (−0.48−−0.23)
Middle	4.38 (3.06-6.05)	0.4 (0.3-0.6)	11.16 (7.61-14.95)	0.5 (0.3-0.6)	0.33 (0.21-0.45)
Low-middle	2.61 (1.74-3.88)	0.5 (0.3-0.7)	7.13 (4.86-9.55)	0.5 (0.4-0.7)	0.63 (0.56-0.7)
Low	0.89 (0.59-1.27)	0.4 (0.3-0.6)	2.19 (1.49-2.96)	0.4 (0.3-0.6)	0.55 (0.46-0.65)
Region					
High-income Asia Pacific	4.14 (2.90-5.38)	2.1 (1.5-2.7)	7.38 (4.76-10.02)	1.5 (1-2)	−1.3 (−1.35−−1.25)
Central Asia	0.12 (0.08-0.17)	0.3 (0.2-0.4)	0.18 (0.12-0.25)	0.3 (0.2-0.4)	−0.1 (−0.2-0.01)
East Asia	3.21 (2.15-5.13)	0.4 (0.3-0.6)	9.94 (6.23-13.78)	0.5 (0.3-0.7)	1.49 (1.08-1.9)
South Asia	2.57 (1.73-3.78)	0.5 (0.3-0.7)	8.58 (5.68-11.70)	0.6 (0.4-0.8)	1 (0.86-1.13)
Southeast Asia	1.08 (0.72-1.46)	0.4 (0.3-0.6)	2.77 (1.80-3.90)	0.5 (0.3-0.7)	0.26 (0.17-0.35)
Australasia	0.15 (0.10-0.19)	0.6 (0.4-0.8)	0.23 (0.15-0.33)	0.5 (0.3-0.7)	−1.06 (−1.12−−0.99)
Caribbean	0.20 (0.11-0.27)	0.8 (0.4-1)	0.21 (0.14-0.30)	0.4 (0.3-0.6)	−2.34 (−2.84−−1.84)
Central Europe	1.54 (1.07-2.03)	1 (0.7-1.4)	1.52 (1.01-2.08)	0.7 (0.5-0.9)	−1.53 (−1.57−−1.49)
Eastern Europe	1.16 (0.79-1.58)	0.4 (0.3-0.6)	1.29 (0.87-1.80)	0.4 (0.3-0.5)	−0.65 (−0.84−−0.47)
Western Europe	5.46 (3.77-7.18)	0.9 (0.6-1.2)	5.97 (4.04-8.10)	0.6 (0.4-0.9)	−1.41 (−1.47−−1.35)
Andean Latin America	0.25 (0.17-0.34)	1.3 (0.9-1.7)	0.59 (0.38-0.84)	1.1 (0.7-1.5)	−0.6 (−0.71−−0.48)
Central Latin America	0.83 (0.55-1.10)	1 (0.7-1.4)	1.43 (0.96-2.02)	0.6 (0.4-0.9)	−2.08 (−2.22−−1.94)
Southern Latin America	0.98 (0.67-1.30)	2.1 (1.5-2.8)	1.22 (0.78-1.81)	1.5 (0.9-2.2)	−1.46 (−1.52−−1.39)

Tropical Latin America	0.74 (0.51-0.98)	0.8 (0.6-1.1)	1.39 (0.96-1.87)	0.6 (0.4-0.8)	−1.27 (−1.34−1.2)
North Africa and Middle East	0.75 (0.50-1.01)	0.5 (0.3-0.6)	1.68 (1.16-2.28)	0.4 (0.3-0.6)	−0.36 (−0.39−0.32)
High-income North America	2.12 (1.48-2.83)	0.6 (0.4-0.8)	2.96 (1.99-4.08)	0.5 (0.3-0.6)	−0.84 (−0.89−0.79)
Oceania	0.007 (0.005-0.01)	0.3 (0.2-0.4)	0.02 (0.01-0.024)	0.2 (0.2-0.3)	−0.26 (−0.29−0.23)
Central Sub-Saharan Africa	0.06 (0.04-0.09)	0.3 (0.2-0.4)	0.12 (0.08-0.18)	0.2 (0.2-0.4)	−0.47 (−0.52−0.41)
Eastern Sub-Saharan Africa	0.23 (0.15-0.32)	0.3 (0.2-0.4)	0.44 (0.30-0.62)	0.3 (0.2-0.4)	−0.31 (−0.36−0.26)
Southern Sub-Saharan Africa	0.06 (0.04-0.08)	0.2 (0.2-0.3)	0.12 (0.08-0.16)	0.2 (0.1-0.3)	−0.04 (−0.25-0.17)
Western Sub-Saharan Africa	0.21 (0.14-0.29)	0.3 (0.2-0.4)	0.39 (0.26-0.57)	0.2 (0.2-0.3)	−0.33 (−0.42—0.25)

Supplementary Table S6. The number and age-standardized rate of YLLs due to GBTC in 1990 and 2019, and its temporal trends from 1990 to 2019

Characteristics	1990		2019		1990–2019
	YLLs No. ×10 ³ (95% UI)	ASR per 100,000 No. (95% UI)	YLLs No. ×10 ³ (95% UI)	ASR per 100,000 No. (95% UI)	EAPC No. (95% CI)
Overall	2127.72 (1914.12–2429.00)	53.4 (48.1–60.8)	3573.04 (3063.59–3916.20)	43.4 (37.1–47.6)	–0.67 (–0.74––0.61)
Sex					
Male	824.16 (735.69–951.30)	44.64 (39.62–51.39)	1557.61 (1283.43–1728.06)	40.43 (33.20–44.64)	–0.21 (–0.31––0.11)
Female	1303.56 (1111.15–1524.51)	61.02 (52.04–71.23)	2015.43 (1665.18–2328.25)	46.21 (38.17–53.35)	–0.97 (–1.04––0.91)
Socio-demographic index					
High	700.26 (574.23–728.25)	67.7 (55.7–70.4)	772.26 (654.01–848.08)	41.3 (35.7–45.7)	–1.87 (–1.93––1.81)
High -middle	612.09 (543.57–655.38)	56.8 (50.6–61.1)	907.62 (682.25–1021.01)	44.5 (33.5–50.1)	–0.8 (–0.93––0.67)
Middle	443.26 (396.41–574.89)	41.6 (37.2–54)	965.38 (843.57–1128.25)	38 (33.2–44.2)	–0.1 (–0.22–0.01)
Low-middle	275.24 (229.52–401.29)	44 (36.9–63.7)	699.74 (607.50–802.34)	49.6 (43.2–56.7)	0.51 (0.43–0.59)
Low	95.75 (75.16–127.29)	38.4 (30.5–51)	226.58 (185.66–261.45)	41.9 (34.7–48)	0.41 (0.3–0.52)
Region					
High-income Asia Pacific	314.59 (256.93–330.63)	155.5 (127.6–163.4)	391.13 (306.53–433.54)	86.9 (72.9–96.9)	–2.25 (–2.31––2.19)
Central Asia	11.57 (9.95–13.37)	24.3 (20.8–28.3)	17.67 (14.40–20.52)	23.2 (19.1–26.8)	–0.23 (–0.35––0.1)
East Asia	324.72 (268.48–512.77)	35.5 (29.5–56.2)	788.95 (594.54–942.22)	37.6 (28.2–44.9)	0.81 (0.41–1.21)
South Asia	277.32 (227.14–396.71)	46.5 (38.2–66.3)	856.55 (650.65–985.36)	58.7 (44.8–67.4)	0.92 (0.77–1.07)
Southeast Asia	109.43 (87.46–127.30)	41.2 (33–47.8)	236.17 (189.90–285.64)	38.2 (30.8–46.4)	–0.31 (–0.41––0.22)
Australasia	8.91 (7.89–10.26)	38.1 (33.6–43.8)	11.40 (9.63–12.91)	23.8 (20.3–26.9)	–1.69 (–1.75––1.63)
Caribbean	17.74 (11.25–20.00)	67.2 (42.8–75.7)	18.52 (15.23–23.15)	35.8 (29.5–44.7)	–2.35 (–2.86––1.84)
Central Europe	138.89 (118.22–148.00)	93.3 (79.6–99.4)	117.36 (100.84–137.47)	56 (48–65.4)	–1.88 (–1.93––1.84)
Eastern Europe	93.76 (77.48–102.18)	33.1 (27.4–36.2)	90.37 (75.94–104.40)	26.7 (22.5–30.9)	–1.18 (–1.44––0.92)
Western Europe	329.16 (259.24–343.62)	57.6 (45.4–60.1)	276.88 (235.44–317.21)	31.7 (27.4–36.7)	–2.21 (–2.3––2.13)
Andean Latin America	25.50 (21.39–29.13)	120.8 (101.6–137.5)	49.95 (38.89–63.66)	88.7 (69.2–112.5)	–1.15 (–1.28––1.02)
Central Latin America	81.12 (61.52–85.78)	94.2 (71.7–99.7)	121.80 (102.84–162.76)	51 (43–68.2)	–2.45 (–2.62––2.29)
Southern Latin America	90.46 (71.77–96.12)	194.9 (154.3–207.4)	98.26 (89.52–124.07)	119.9 (109.5–150.8)	–1.86 (–1.94––1.79)

Tropical Latin America	71.80 (60.72-78.98)	76.2 (63.8-83.2)	120.10 (105.75-137.99)	48.8 (43-56.3)	−1.53 (−1.6−−1.46)
North Africa and Middle East	75.11 (60.21-90.75)	41.8 (33.6-51.7)	150.64 (127.73-178.66)	33.5 (29-40.4)	−0.78 (−0.81−−0.76)
High-income North America	98.18 (83.55-104.83)	28.4 (24.2-30.3)	116.36 (106.95-139.73)	19.2 (17.7-23.1)	−1.41 (−1.47−−1.35)
Oceania	0.78 (0.60-0.98)	24.8 (19.3-30.4)	1.70 (1.23-2.25)	22.4 (16.6-29)	−0.33 (−0.36−−0.3)
Central Sub-Saharan Africa	6.54 (4.77-8.52)	27.2 (20.6-34.6)	12.96 (9.51-17.78)	23.1 (17-31.2)	−0.55 (−0.59−−0.51)
Eastern Sub-Saharan Africa	25.19 (19.40-31.54)	31.4 (24.7-39.1)	46.21 (37.48-56.50)	27.3 (22.4-33.1)	−0.52 (−0.56−−0.48)
Southern Sub-Saharan Africa	5.90 (5.17-6.82)	20.6 (17.8-24.1)	11.30 (9.61-13.04)	19.5 (16.6-22.5)	−0.02 (−0.24-0.19)
Western Sub-Saharan Africa	21.05 (17.12-27.36)	23.9 (19.6-31.3)	38.78 (31.41-56.09)	20.6 (16.9-30.3)	−0.43 (−0.5−−0.35)

Supplementary Table S7. The change of GBTC cases between 1990 and 2019 at national level, both sexes

Location	Incidence			Prevalence			Deaths			DALYs		
	Percentage	change	EAPC	Percentage	change	EAPC	Percentage	change	EAPC	Percentage	change	EAPC
	in absolute	number	No. (95% CI)	in absolute	number	No. (95% CI)	in absolute	number	No. (95% CI)	in absolute	number	No. (95% CI)
	(%)			(%)			(%)			(%)		
Afghanistan	62.17		-0.23 (-0.3--0.16)	71.78		-0.17 (-0.24--0.1)	58.17		-0.23 (-0.3--0.15)	72.81		-0.37 (-0.48--0.26)
Albania	90.80		-0.03 (-0.4-0.35)	91.31		0.11 (-0.29-0.51)	90.37		-0.11 (-0.47-0.25)	66.38		-0.13 (-0.5-0.25)
Algeria	157.61		-0.26 (-0.34--0.18)	167.49		-0.13 (-0.19--0.07)	151.81		-0.34 (-0.44--0.24)	131.76		-0.57 (-0.66--0.48)
American Samoa	42.85		-1.73 (-1.91--1.55)	45.36		-1.53 (-1.74--1.32)	40.56		-1.9 (-2.06--1.74)	32.55		-1.81 (-1.99--1.63)
Andorra	115.95		-0.93 (-1.02--0.83)	116.13		-0.7 (-0.78--0.62)	121.55		-1.01 (-1.11--0.91)	88.64		-1.07 (-1.16--0.97)
Angola	162.33		-0.22 (-0.27--0.17)	171.81		-0.1 (-0.16--0.03)	158.24		-0.24 (-0.29--0.2)	150.67		-0.42 (-0.47--0.38)
Antigua and Barbuda	-26.98		-3.42 (-4.02--2.82)	-23.05		-3.37 (-3.99--2.75)	-29.38		-3.43 (-4.02--2.84)	-24.74		-3.64 (-4.24--3.04)
Argentina	9.82		-1.68 (-1.82--1.53)	16.08		-1.4 (-1.54--1.27)	5.56		-1.86 (-2--1.72)	3.53		-1.68 (-1.79--1.58)
Armenia	112.08		1.16 (0.67-1.64)	105.47		1.21 (0.7-1.72)	118.03		1.17 (0.7-1.63)	90.50		1.06 (0.58-1.53)
Australia	51.54		-1.38 (-1.48--1.29)	62.01		-1.01 (-1.12--0.89)	45.03		-1.63 (-1.71--1.55)	25.74		-1.82 (-1.9--1.74)
Austria	-29.09		-3.02 (-3.22--2.81)	-19.43		-2.49 (-2.67--2.32)	-35.10		-3.4 (-3.63--3.17)	-40.25		-3.52 (-3.76--3.27)
Azerbaijan	98.60		0.59 (0.43-0.75)	96.66		0.42 (0.25-0.58)	99.49		0.74 (0.58-0.9)	95.05		0.19 (0.05-0.34)
Bahamas	3.34		-3.24 (-3.74--2.75)	4.92		-3.18 (-3.67--2.69)	2.98		-3.26 (-3.76--2.76)	-0.14		-3.36 (-3.89--2.83)
Bahrain	251.66		-1.18 (-1.39--0.97)	301.36		-0.8 (-1.01--0.59)	222.89		-1.35 (-1.58--1.13)	229.95		-1.75 (-1.92--1.58)
Bangladesh	186.82		0.24 (0-0.47)	199.02		0.43 (0.23-0.63)	182.22		0.15 (-0.12-0.42)	160.06		0.05 (-0.16-0.25)
Barbados	-31.34		-3.36 (-3.89--2.82)	-28.23		-3.26 (-3.8--2.71)	-32.66		-3.39 (-3.92--2.86)	-31.11		-3.5 (-4.04--2.95)
Belarus	33.00		0.21 (-0.07-0.49)	35.45		0.33 (0.1-0.56)	30.76		0.12 (-0.19-0.43)	25.22		0.01 (-0.36-0.38)
Belgium	-19.01		-2.23 (-2.42--2.03)	-14.94		-1.85 (-2.06--1.64)	-19.31		-2.4 (-2.58--2.23)	-26.16		-2.31 (-2.48--2.13)
Belize	28.08		-3.11 (-3.37--2.85)	36.88		-2.98 (-3.25--2.71)	22.24		-3.19 (-3.45--2.94)	38.45		-3.07 (-3.32--2.82)
Benin	77.98		-0.91 (-1.01--0.82)	85.35		-0.86 (-0.96--0.75)	74.23		-0.93 (-1.02--0.84)	83.83		-0.97 (-1.06--0.88)
Bermuda	-49.06		-5.27 (-5.89--4.65)	-45.88		-4.93 (-5.55--4.31)	-50.88		-5.5 (-6.12--4.88)	-57.91		-5.66 (-6.31--5.01)
Bhutan	220.74		1.16 (1.08-1.24)	225.60		1.34 (1.27-1.42)	221.14		1.09 (1-1.18)	170.98		0.76 (0.67-0.85)
Bolivia	138.52		-0.63 (-0.76--0.5)	149.99		-0.45 (-0.58--0.32)	131.37		-0.74 (-0.87--0.62)	109.12		-1.04 (-1.17--0.91)
Bosnia and Herzegovina	-26.84		-3.38 (-3.65--3.11)	-29.35		-3.35 (-3.63--3.08)	-24.69		-3.38 (-3.64--3.11)	-36.51		-3.64 (-3.94--3.34)

Botswana	156.31	0.02 (-0.2-0.24)	172.34	0.15 (-0.04-0.35)	147.06	-0.07 (-0.31-0.17)	155.84	-0.11 (-0.38-0.16)
Brazil	84.07	-1.42 (-1.5--1.34)	89.13	-1.22 (-1.29--1.14)	82.09	-1.54 (-1.62--1.46)	66.91	-1.54 (-1.61--1.47)
Brunei Darussalam	144.19	-0.28 (-0.45--0.12)	165.26	-0.02 (-0.19-0.14)	131.89	-0.42 (-0.58--0.26)	125.07	-0.67 (-0.87--0.46)
Bulgaria	5.56	-0.06 (-0.2-0.08)	6.42	0.13 (-0.03-0.29)	4.48	-0.17 (-0.32--0.03)	-6.76	-0.12 (-0.27-0.03)
Burkina Faso	63.94	-0.87 (-1.11--0.64)	69.83	-0.76 (-1.01--0.51)	61.76	-0.9 (-1.13--0.68)	67.61	-0.87 (-1.11--0.62)
Burundi	54.53	-0.87 (-0.95--0.8)	64.52	-0.72 (-0.78--0.66)	51.67	-0.85 (-0.93--0.78)	57.45	-1.08 (-1.17--0.98)
Cabo Verde	44.83	-1.06 (-1.62--0.49)	54.46	-0.91 (-1.47--0.34)	39.46	-1.16 (-1.71--0.6)	48.56	-1.21 (-1.69--0.72)
Cambodia	129.62	-0.5 (-0.69--0.31)	142.03	-0.29 (-0.48--0.09)	123.04	-0.62 (-0.8--0.43)	101.50	-0.93 (-1.12--0.74)
Cameroon	104.61	-0.9 (-0.95--0.86)	110.59	-0.82 (-0.89--0.74)	100.56	-0.96 (-1--0.92)	105.09	-0.94 (-0.98--0.9)
Canada	39.57	-1.85 (-2--1.7)	44.31	-1.58 (-1.72--1.43)	36.97	-2.02 (-2.17--1.86)	21.24	-2.22 (-2.4--2.04)
Central African Republic	55.68	-0.51 (-0.55--0.46)	58.40	-0.48 (-0.51--0.44)	54.79	-0.5 (-0.55--0.46)	59.19	-0.53 (-0.58--0.49)
Chad	61.91	-0.51 (-0.55--0.47)	67.83	-0.46 (-0.51--0.41)	58.86	-0.52 (-0.56--0.48)	70.93	-0.48 (-0.52--0.45)
Chile	36.17	-2.28 (-2.43--2.12)	46.40	-1.92 (-2.07--1.77)	31.31	-2.53 (-2.69--2.37)	15.57	-2.72 (-2.88--2.56)
China	210.66	1.56 (1.12-2)	244.89	2.12 (1.66-2.57)	185.20	1.1 (0.67-1.52)	147.10	0.93 (0.5-1.35)
Colombia	78.02	-1.99 (-2.13--1.85)	85.23	-1.72 (-1.86--1.57)	74.88	-2.15 (-2.28--2.02)	51.66	-2.25 (-2.41--2.09)
Comoros	124.90	0.05 (-0.03-0.13)	131.10	0.16 (0.07-0.24)	123.68	0.02 (-0.05-0.09)	118.11	-0.09 (-0.2-0.02)
Republic of Congo	81.81	-0.95 (-1.07--0.82)	88.98	-0.83 (-0.97--0.69)	79.57	-0.96 (-1.08--0.83)	79.62	-1.14 (-1.27--1.02)
Cook Islands	15.10	-2.18 (-2.37--2)	19.27	-1.88 (-2.06--1.7)	11.54	-2.42 (-2.6--2.23)	-2.86	-2.52 (-2.72--2.32)
Costa Rica	48.81	-3.1 (-3.36--2.85)	52.43	-2.92 (-3.17--2.68)	47.45	-3.21 (-3.46--2.96)	39.51	-3.21 (-3.46--2.96)
Côte d'Ivoire	95.51	-1.19 (-1.26--1.13)	96.55	-1.12 (-1.21--1.04)	95.92	-1.2 (-1.26--1.14)	90.10	-1.26 (-1.33--1.19)
Croatia	30.20	-0.31 (-0.53--0.08)	42.77	0.13 (-0.11-0.37)	20.71	-0.63 (-0.84--0.43)	2.73	-0.89 (-1.09--0.69)
Cuba	-36.48	-4.12 (-4.69--3.54)	-35.11	-3.98 (-4.55--3.4)	-37.13	-4.21 (-4.78--3.64)	-40.90	-4.28 (-4.82--3.72)
Cyprus	59.84	-1.72 (-1.9--1.55)	80.22	-1.16 (-1.34--0.99)	47.01	-2.06 (-2.22--1.91)	32.84	-2.29 (-2.48--2.1)
Czech Republic	-10.45	-2.07 (-2.23--1.92)	-0.58	-1.67 (-1.87--1.47)	-16.36	-2.33 (-2.45--2.21)	-23.81	-2.48 (-2.59--2.36)
North Korea	80.45	-0.32 (-0.39--0.25)	78.69	-0.17 (-0.25--0.09)	80.92	-0.46 (-0.54--0.37)	63.31	-0.45 (-0.52--0.38)
Democratic Republic of the Congo	94.27	-0.49 (-0.55--0.43)	96.54	-0.43 (-0.51--0.36)	94.31	-0.51 (-0.56--0.46)	92.34	-0.52 (-0.57--0.47)
Denmark	49.56	0.21 (-0.01-0.43)	90.61	1.2 (0.94-1.45)	21.40	-0.67 (-0.85--0.49)	13.92	-0.84 (-1--0.67)
Djibouti	360.48	0.32 (0.27-0.36)	365.49	0.4 (0.35-0.45)	362.55	0.31 (0.26-0.36)	341.04	0.21 (0.15-0.27)
Dominica	-51.42	-3.33 (-3.9--2.76)	-51.34	-3.38 (-3.94--2.81)	-50.84	-3.27 (-3.84--2.69)	-50.45	-3.44 (-4.03--2.85)

Dominican Republic	208.97	0.97 (0.44-1.5)	214.52	1.05 (0.53-1.57)	203.51	0.88 (0.36-1.41)	186.00	0.84 (0.29-1.39)
Ecuador	110.05	-0.87 (-1.1--0.64)	124.09	-0.65 (-0.86--0.45)	98.37	-1.05 (-1.3--0.81)	79.42	-1.36 (-1.6--1.12)
Egypt	125.56	0.27 (0.19-0.35)	139.15	0.43 (0.35-0.5)	115.71	0.15 (0.06-0.24)	114.03	0.1 (0.03-0.18)
El Salvador	109.56	-0.36 (-0.56--0.16)	112.56	-0.23 (-0.43--0.03)	107.31	-0.49 (-0.69--0.28)	80.47	-0.68 (-0.87--0.49)
Equatorial Guinea	115.64	-0.02 (-0.15-0.1)	128.69	0.18 (0.04-0.31)	110.88	-0.07 (-0.19-0.05)	94.10	-0.53 (-0.69--0.38)
Eritrea	223.99	0.75 (0.59-0.91)	236.87	0.85 (0.7-1)	223.49	0.74 (0.57-0.91)	204.57	0.54 (0.38-0.7)
Estonia	18.20	-0.32 (-0.45--0.18)	20.09	-0.11 (-0.25-0.04)	17.90	-0.43 (-0.57--0.3)	-3.80	-0.9 (-1.03--0.77)
Eswatini	106.55	0.36 (0-0.73)	108.81	0.34 (0.06-0.62)	104.92	0.37 (-0.02-0.76)	107.34	0.41 (-0.03-0.86)
Ethiopia	30.72	-1.63 (-1.76--1.49)	33.52	-1.49 (-1.63--1.35)	33.78	-1.56 (-1.69--1.44)	14.58	-2.08 (-2.22--1.94)
Fiji	109.77	0.23 (0.04-0.42)	111.11	0.35 (0.14-0.57)	107.39	0.12 (-0.05-0.3)	93.54	0.12 (-0.1-0.34)
Finland	21.57	-1.34 (-1.43--1.24)	31.66	-0.9 (-0.97--0.83)	17.10	-1.6 (-1.71--1.48)	1.86	-1.7 (-1.81--1.59)
France	-17.93	-2.84 (-2.93--2.75)	-14.23	-2.47 (-2.56--2.39)	-18.55	-3.05 (-3.15--2.95)	-29.69	-3.17 (-3.27--3.07)
Gabon	43.96	-0.88 (-0.95--0.82)	50.74	-0.77 (-0.83--0.71)	41.65	-0.9 (-0.98--0.83)	42.57	-1.04 (-1.13--0.95)
Gambia	172.27	-0.09 (-0.26-0.08)	171.96	-0.05 (-0.24-0.14)	174.58	-0.09 (-0.25-0.07)	164.19	-0.09 (-0.27-0.1)
Georgia	24.43	1.56 (1.17-1.94)	19.04	1.53 (1.15-1.92)	29.73	1.6 (1.23-1.98)	25.49	1.98 (1.57-2.39)
Germany	-11.47	-2.01 (-2.24--1.77)	2.85	-1.32 (-1.53--1.1)	-21.59	-2.58 (-2.84--2.32)	-30.43	-2.68 (-2.86--2.5)
Ghana	109.44	-0.77 (-0.86--0.68)	113.14	-0.7 (-0.82--0.59)	107.40	-0.79 (-0.87--0.71)	103.63	-0.79 (-0.88--0.7)
Greece	59.62	0.25 (-0.2-0.71)	56.86	0.46 (0.01-0.9)	63.59	0.18 (-0.28-0.64)	39.00	0.21 (-0.19-0.61)
Greenland	50.17	-1.46 (-1.71--1.21)	52.96	-1.27 (-1.49--1.05)	49.07	-1.54 (-1.81--1.28)	30.25	-1.72 (-1.94--1.49)
Grenada	-48.89	-3.98 (-4.6--3.34)	-44.32	-3.9 (-4.53--3.27)	-51.47	-4 (-4.62--3.38)	-46.09	-4.11 (-4.77--3.44)
Guam	25.34	-3.33 (-3.51--3.14)	26.88	-2.98 (-3.14--2.82)	24.25	-3.6 (-3.82--3.37)	16.40	-3.1 (-3.27--2.93)
Guatemala	18.00	-4.53 (-4.89--4.16)	21.34	-4.28 (-4.64--3.92)	16.71	-4.65 (-5.02--4.27)	6.08	-4.61 (-4.98--4.24)
Guinea	34.23	-0.52 (-0.62--0.42)	37.07	-0.47 (-0.58--0.36)	33.19	-0.54 (-0.63--0.46)	36.34	-0.5 (-0.6--0.39)
Guinea-Bissau	27.36	-0.98 (-1.1--0.87)	32.46	-0.89 (-1.02--0.76)	25.30	-1 (-1.11--0.9)	28.84	-1.04 (-1.15--0.94)
Guyana	-36.31	-3.46 (-3.96--2.95)	-34.59	-3.4 (-3.9--2.88)	-37.22	-3.49 (-3.98--2.99)	-36.54	-3.41 (-3.9--2.93)
Haiti	18.09	-1.96 (-2.21--1.71)	20.96	-1.88 (-2.15--1.62)	17.49	-1.98 (-2.21--1.74)	14.88	-2.07 (-2.32--1.82)
Honduras	277.25	1.11 (0.93-1.29)	275.22	1.1 (0.93-1.28)	276.94	1.14 (0.95-1.33)	241.00	0.81 (0.64-0.97)
Hungary	-35.94	-2.76 (-2.88--2.65)	-35.58	-2.66 (-2.77--2.55)	-34.70	-2.75 (-2.87--2.63)	-39.24	-2.7 (-2.84--2.57)
Iceland	15.46	-1.94 (-2.04--1.85)	19.14	-1.71 (-1.79--1.62)	13.27	-2.06 (-2.18--1.93)	3.61	-2.24 (-2.33--2.16)
India	256.09	1.15 (1-1.29)	260.24	1.35 (1.22-1.47)	255.70	1.03 (0.87-1.19)	226.75	1.12 (0.98-1.26)
Indonesia	102.57	-0.1 (-0.14--0.06)	108.98	-0.01 (-0.05-0.03)	98.78	-0.17 (-0.21--0.13)	80.71	-0.49 (-0.52--0.47)

Iran	172.03	-0.23 (-0.38--0.07)	183.10	-0.02 (-0.18-0.15)	164.76	-0.37 (-0.54--0.21)	132.70	-0.47 (-0.63--0.31)
Iraq	175.87	-0.15 (-0.3-0.01)	203.47	0.15 (-0.04-0.35)	163.12	-0.25 (-0.39--0.11)	167.52	-0.45 (-0.56--0.35)
Ireland	16.89	-1.83 (-2.14--1.52)	29.75	-1.33 (-1.61--1.05)	10.48	-2.14 (-2.46--1.81)	1.03	-2.36 (-2.67--2.04)
Israel	11.92	-3.08 (-3.29--2.87)	19.17	-2.7 (-2.92--2.47)	7.17	-3.3 (-3.49--3.11)	-2.53	-3.4 (-3.59--3.2)
Italy	31.54	-1.1 (-1.24--0.97)	39.36	-0.72 (-0.88--0.56)	26.05	-1.38 (-1.49--1.26)	4.47	-1.6 (-1.7--1.5)
Jamaica	17.95	-0.99 (-1.31--0.66)	22.07	-0.87 (-1.17--0.55)	16.09	-1.06 (-1.4--0.73)	23.82	-0.9 (-1.23--0.57)
Japan	69.12	-1.48 (-1.53--1.43)	72.32	-1.02 (-1.1--0.94)	68.04	-1.81 (-1.85--1.76)	17.83	-2.17 (-2.22--2.12)
Jordan	273.14	-0.96 (-1.05--0.87)	303.03	-0.66 (-0.74--0.58)	253.87	-1.13 (-1.22--1.03)	232.51	-1.43 (-1.55--1.31)
Kazakhstan	19.63	-0.79 (-1.03--0.55)	19.97	-0.76 (-0.94--0.57)	19.62	-0.8 (-1.07--0.52)	18.73	-0.91 (-1.21--0.61)
Kenya	190.91	0.59 (0.49-0.68)	198.03	0.61 (0.51-0.71)	215.72	1.12 (0.95-1.29)	220.94	0.98 (0.81-1.15)
Kiribati	61.42	-0.31 (-0.36--0.27)	67.58	-0.27 (-0.32--0.22)	56.80	-0.34 (-0.39--0.29)	57.31	-0.51 (-0.57--0.45)
Kuwait	130.34	-1.81 (-2.03--1.58)	144.09	-1.58 (-1.83--1.32)	124.54	-1.92 (-2.13--1.71)	106.82	-2.16 (-2.34--1.97)
Kyrgyzstan	29.42	-0.35 (-0.53--0.18)	32.74	-0.36 (-0.5--0.22)	28.86	-0.29 (-0.5--0.07)	36.04	-0.44 (-0.62--0.25)
Laos	38.47	-1.53 (-1.69--1.36)	47.20	-1.35 (-1.52--1.18)	34.64	-1.6 (-1.76--1.44)	25.95	-1.93 (-2.09--1.77)
Latvia	1.48	-0.52 (-0.86--0.17)	0.97	-0.4 (-0.72--0.08)	2.62	-0.57 (-0.92--0.21)	-9.72	-0.74 (-1.13--0.35)
Lebanon	141.01	0.26 (0.13-0.4)	161.08	0.7 (0.56-0.83)	125.83	-0.08 (-0.22-0.06)	93.74	-0.26 (-0.38--0.14)
Lesotho	81.32	1.9 (1.63-2.17)	83.09	1.85 (1.6-2.1)	79.23	1.89 (1.62-2.17)	92.75	2.09 (1.78-2.4)
Liberia	19.38	-1.18 (-1.37--0.98)	25.70	-1.08 (-1.29--0.87)	16.45	-1.22 (-1.41--1.03)	25.03	-1.25 (-1.46--1.03)
Libya	147.95	-0.12 (-0.3-0.06)	157.26	-0.02 (-0.2-0.17)	140.97	-0.22 (-0.39--0.05)	145.80	-0.25 (-0.41--0.08)
Lithuania	14.23	-0.76 (-1.08--0.44)	14.53	-0.64 (-0.95--0.33)	13.91	-0.84 (-1.17--0.52)	-2.69	-1.07 (-1.41--0.73)
Luxembourg	-16.24	-2.89 (-2.97--2.8)	-8.92	-2.48 (-2.57--2.4)	-16.35	-2.99 (-3.09--2.89)	-23.53	-3.12 (-3.22--3.01)
Madagascar	113.12	0.08 (-0.02-0.17)	120.00	0.08 (0-0.16)	109.41	0.08 (-0.01-0.18)	120.26	0 (-0.09-0.09)
Malawi	74.63	-0.29 (-0.37--0.2)	78.07	-0.14 (-0.2--0.08)	75.69	-0.28 (-0.36--0.2)	69.56	-0.41 (-0.52--0.31)
Malaysia	182.97	-0.3 (-0.42--0.18)	210.09	0.07 (-0.05-0.2)	163.24	-0.57 (-0.7--0.44)	145.37	-0.74 (-0.89--0.58)
Maldives	116.53	-1.92 (-2.17--1.67)	150.29	-1.3 (-1.57--1.03)	98.11	-2.29 (-2.53--2.06)	62.91	-2.85 (-3.13--2.57)
Mali	74.24	-0.51 (-0.61--0.41)	79.12	-0.4 (-0.5--0.3)	73.76	-0.51 (-0.61--0.42)	69.87	-0.61 (-0.71--0.5)
Malta	21.19	-2.25 (-2.33--2.17)	26.79	-1.88 (-1.95--1.81)	15.79	-2.5 (-2.58--2.42)	1.91	-2.54 (-2.61--2.47)
Marshall Islands	80.10	-0.55 (-0.61--0.5)	95.01	-0.4 (-0.45--0.34)	69.55	-0.67 (-0.72--0.62)	86.84	-0.61 (-0.68--0.55)
Mauritania	18.86	-1.74 (-1.95--1.54)	23.43	-1.6 (-1.82--1.39)	17.98	-1.77 (-1.96--1.58)	12.85	-1.91 (-2.11--1.7)
Mauritius	80.66	-1.02 (-1.34--0.7)	92.07	-0.72 (-1.06--0.39)	73.59	-1.22 (-1.53--0.92)	61.42	-1.25 (-1.57--0.94)
Mexico	60.84	-2.34 (-2.52--2.17)	66.82	-2.18 (-2.35--2)	56.70	-2.46 (-2.62--2.29)	48.68	-2.46 (-2.64--2.29)

Micronesia (Federated States of)	31.71	-0.52 (-0.61--0.44)	41.75	-0.35 (-0.42--0.27)	24.88	-0.66 (-0.76--0.57)	28.19	-0.73 (-0.82--0.64)
Monaco	-27.62	-2.09 (-2.46--1.71)	-28.39	-1.91 (-2.3--1.53)	-26.83	-2.22 (-2.58--1.86)	-29.31	-2.23 (-2.58--1.87)
Mongolia	84.07	-1.01 (-1.2--0.82)	92.53	-0.94 (-1.1--0.78)	80.83	-0.98 (-1.2--0.77)	94.02	-1.15 (-1.36--0.94)
Montenegro	56.57	-0.02 (-0.12-0.07)	49.83	-0.14 (-0.2--0.07)	62.30	0.09 (-0.04-0.21)	50.09	-0.11 (-0.29-0.06)
Morocco	133.35	0.09 (0.01-0.16)	143.82	0.23 (0.15-0.31)	128.88	0.03 (-0.04-0.09)	120.95	-0.08 (-0.13--0.04)
Mozambique	136.11	1.23 (1.09-1.38)	141.94	1.31 (1.15-1.47)	132.38	1.17 (1.04-1.31)	135.48	1.24 (1.07-1.4)
Myanmar	40.02	-1.27 (-1.34--1.21)	46.49	-1.09 (-1.16--1.02)	36.56	-1.37 (-1.43--1.31)	22.01	-1.73 (-1.8--1.67)
Namibia	96.50	-0.09 (-0.29-0.11)	104.08	0.06 (-0.1-0.23)	93.68	-0.16 (-0.37-0.06)	87.08	-0.32 (-0.56--0.08)
Nauru	-4.34	-0.65 (-0.77--0.54)	3.38	-0.53 (-0.63--0.44)	-11.03	-0.79 (-0.92--0.66)	-4.87	-0.76 (-0.93--0.59)
Nepal	241.56	1.46 (1.35-1.58)	242.77	1.53 (1.42-1.64)	242.83	1.45 (1.34-1.55)	199.67	1.15 (1.03-1.27)
Netherlands	14.03	-1.27 (-1.51--1.03)	18.64	-0.96 (-1.23--0.69)	11.97	-1.44 (-1.65--1.23)	4.12	-1.55 (-1.74--1.35)
New Zealand	79.76	-0.26 (-0.37--0.14)	108.76	0.34 (0.23-0.45)	58.11	-0.78 (-0.89--0.66)	44.25	-0.9 (-1--0.79)
Nicaragua	161.09	-0.82 (-1.27--0.35)	168.56	-0.68 (-1.07--0.28)	158.74	-0.86 (-1.39--0.32)	128.61	-1.23 (-1.62--0.84)
Niger	117.51	-0.9 (-1.03--0.77)	121.90	-0.82 (-0.96--0.68)	116.70	-0.92 (-1.04--0.8)	112.05	-0.99 (-1.13--0.85)
Nigeria	91.88	0.26 (0.16-0.36)	97.37	0.33 (0.21-0.45)	90.53	0.26 (0.16-0.35)	92.53	0.14 (0.05-0.22)
Niue	-19.52	-0.79 (-0.85--0.74)	-12.31	-0.57 (-0.63--0.51)	-26.40	-1.06 (-1.12--1)	-22.32	-1.12 (-1.18--1.05)
Macedonia	45.68	-1.01 (-1.44--0.58)	44.54	-1.03 (-1.43--0.62)	47.27	-0.96 (-1.41--0.51)	32.95	-1.29 (-1.73--0.85)
Northern Mariana Islands	134.52	-0.87 (-1.23--0.52)	135.64	-0.69 (-1.09--0.28)	134.05	-1.02 (-1.34--0.7)	106.26	-1.06 (-1.38--0.73)
Norway	32.97	-0.09 (-0.23-0.05)	75.34	1.04 (0.88-1.2)	3.77	-1.17 (-1.31--1.03)	-2.50	-1.41 (-1.55--1.27)
Oman	93.68	-0.43 (-0.59--0.26)	117.58	-0.21 (-0.39--0.04)	77.74	-0.57 (-0.74--0.4)	77.46	-0.95 (-1.18--0.73)
Pakistan	136.98	0.6 (0.33-0.88)	147.85	0.65 (0.4-0.91)	129.51	0.57 (0.29-0.86)	145.77	0.49 (0.19-0.8)
Palau	98.10	-0.31 (-0.34--0.28)	113.50	-0.15 (-0.19--0.11)	84.28	-0.51 (-0.55--0.47)	93.02	-0.54 (-0.59--0.5)
Palestine	147.38	-0.21 (-0.54-0.11)	164.22	-0.08 (-0.45-0.29)	137.20	-0.28 (-0.58-0.01)	147.87	-0.37 (-0.68--0.07)
Panama	45.54	-2.23 (-2.49--1.96)	50.29	-2.07 (-2.35--1.79)	43.04	-2.32 (-2.57--2.06)	34.15	-2.27 (-2.55--2)
Papua New Guinea	148.40	-0.11 (-0.13--0.09)	160.18	0 (-0.02-0.02)	142.83	-0.17 (-0.19--0.15)	146.75	-0.17 (-0.19--0.15)
Paraguay	116.92	-0.86 (-1.01--0.71)	124.73	-0.75 (-0.91--0.59)	110.53	-0.96 (-1.1--0.82)	108.19	-0.96 (-1.1--0.82)
Peru	140.21	-0.58 (-0.8--0.37)	161.32	-0.18 (-0.38-0.02)	123.95	-0.91 (-1.12--0.69)	98.20	-1.08 (-1.31--0.86)
Philippines	111.46	-0.93 (-1.12--0.73)	117.54	-0.81 (-1--0.62)	105.71	-1.05 (-1.25--0.85)	99.39	-1.05 (-1.23--0.86)
Poland	-1.88	-2.05 (-2.16--1.93)	-1.78	-1.9 (-2.01--1.79)	-0.15	-2.07 (-2.18--1.97)	-9.70	-2.09 (-2.16--2.01)

Portugal	31.60	-1.29 (-1.37--1.21)	57.22	-0.43 (-0.5--0.35)	14.43	-1.96 (-2.06--1.86)	-2.24	-1.98 (-2.09--1.88)
Puerto Rico	8.44	-2.49 (-2.65--2.32)	12.23	-2.17 (-2.32--2.02)	7.08	-2.69 (-2.86--2.52)	-4.86	-2.68 (-2.86--2.51)
Qatar	369.31	-1.38 (-1.6--1.16)	454.82	-0.86 (-1.09--0.63)	312.69	-1.66 (-1.88--1.45)	321.65	-2.14 (-2.4--1.88)
South Korea	138.74	-1.26 (-1.36--1.16)	177.74	-0.54 (-0.65--0.43)	110.81	-1.81 (-1.9--1.71)	50.73	-2.59 (-2.7--2.48)
Moldova	-37.37	-2.7 (-2.98--2.42)	-38.59	-2.62 (-2.92--2.32)	-35.83	-2.72 (-2.99--2.46)	-42.40	-2.77 (-3.07--2.47)
Romania	-17.22	-1.37 (-1.66--1.08)	-18.76	-1.29 (-1.61--0.97)	-15.51	-1.38 (-1.66--1.11)	-26.01	-1.5 (-1.79--1.22)
Russia	7.60	-1.06 (-1.28--0.83)	18.68	-0.53 (-0.7--0.36)	-1.05	-1.47 (-1.74--1.21)	-7.28	-1.57 (-1.87--1.27)
Rwanda	64.58	-1.11 (-1.31--0.91)	73.93	-0.85 (-1.05--0.65)	63.57	-1.11 (-1.31--0.91)	54.43	-1.57 (-1.82--1.32)
Saint Kitts and Nevis	-54.04	-4.43 (-5.02--3.84)	-51.08	-4.52 (-5.11--3.92)	-56.20	-4.4 (-4.99--3.81)	-50.90	-4.77 (-5.38--4.15)
Saint Lucia	-20.35	-4.38 (-5.12--3.64)	-16.57	-4.18 (-4.91--3.45)	-21.90	-4.49 (-5.23--3.75)	-23.25	-4.45 (-5.19--3.7)
Saint Vincent and the Grenadines	-26.07	-3.18 (-3.76--2.59)	-24.71	-3.16 (-3.73--2.59)	-26.54	-3.17 (-3.77--2.57)	-25.07	-3.24 (-3.8--2.67)
Samoa	43.63	-0.66 (-0.7--0.62)	50.90	-0.5 (-0.53--0.47)	37.82	-0.8 (-0.86--0.74)	37.66	-0.78 (-0.82--0.73)
San Marino	51.64	-0.98 (-1.15--0.82)	50.46	-0.82 (-1--0.64)	61.29	-0.85 (-0.97--0.74)	42.49	-0.9 (-1.02--0.77)
Sao Tome and Principe	81.18	0.45 (0.35-0.55)	87.65	0.5 (0.41-0.6)	76.70	0.41 (0.32-0.51)	84.28	0.32 (0.18-0.45)
Saudi Arabia	249.12	0.61 (0.21-1.01)	312.99	1.01 (0.67-1.36)	167.76	-0.3 (-0.66-0.06)	213.05	-0.19 (-0.51-0.14)
Senegal	80.18	-0.74 (-0.94--0.55)	83.92	-0.66 (-0.88--0.44)	78.86	-0.78 (-0.96--0.59)	77.60	-0.78 (-1--0.56)
Serbia	30.82	-0.56 (-0.69--0.42)	25.75	-0.57 (-0.71--0.44)	34.86	-0.52 (-0.65--0.39)	15.76	-0.78 (-0.93--0.62)
Seychelles	61.41	-0.98 (-1.22--0.75)	81.29	-0.72 (-0.97--0.48)	47.75	-1.18 (-1.41--0.95)	55.51	-1.37 (-1.63--1.11)
Sierra Leone	43.50	-0.64 (-0.76--0.52)	49.40	-0.58 (-0.72--0.43)	39.70	-0.69 (-0.8--0.58)	50.12	-0.61 (-0.74--0.49)
Singapore	171.93	-1.21 (-1.51--0.92)	211.19	-0.58 (-0.89--0.27)	144.84	-1.68 (-1.96--1.4)	111.12	-2 (-2.29--1.7)
Slovakia	33.28	-0.6 (-0.71--0.49)	42.53	-0.32 (-0.47--0.18)	26.40	-0.83 (-0.94--0.72)	14.58	-1.11 (-1.21--1.02)
Slovenia	53.55	-0.52 (-0.67--0.38)	83.40	0.31 (0.16-0.46)	32.00	-1.2 (-1.36--1.05)	11.36	-1.48 (-1.63--1.33)
Solomon Islands	122.95	-0.08 (-0.14--0.01)	135.81	0.05 (-0.03-0.13)	114.42	-0.17 (-0.22--0.11)	115.46	-0.23 (-0.29--0.17)
Somalia	169.08	0.41 (0.32-0.49)	169.61	0.44 (0.35-0.53)	174.70	0.48 (0.39-0.56)	166.71	0.37 (0.29-0.45)
South Africa	106.55	-0.08 (-0.4-0.23)	106.67	-0.08 (-0.35-0.18)	107.83	-0.08 (-0.42-0.27)	95.35	-0.18 (-0.5-0.14)
South Sudan	45.06	-0.16 (-0.24--0.08)	49.79	-0.11 (-0.2--0.02)	44.13	-0.15 (-0.22--0.08)	49.61	-0.22 (-0.3--0.14)
Spain	21.39	-1.7 (-1.86--1.55)	37.96	-1.12 (-1.26--0.99)	8.35	-2.22 (-2.38--2.05)	-8.49	-2.36 (-2.51--2.2)
Sri Lanka	27.06	-3.26 (-3.85--2.67)	42.21	-2.8 (-3.4--2.2)	16.21	-3.62 (-4.2--3.03)	9.28	-3.67 (-4.3--3.05)
Sudan	83.42	-0.21 (-0.32--0.11)	93.32	-0.09 (-0.2-0.02)	76.95	-0.29 (-0.38--0.19)	75.25	-0.44 (-0.53--0.35)

Suriname	-0.52	-3.03 (-3.64--2.42)	1.21	-2.98 (-3.6--2.35)	-2.22	-3.08 (-3.68--2.48)	-3.94	-3.15 (-3.75--2.55)
Sweden	-37.01	-2.91 (-3.2--2.61)	-48.83	-3.44 (-3.85--3.02)	-20.08	-2.27 (-2.46--2.08)	-26.17	-2.44 (-2.63--2.25)
Switzerland	39.22	-1.09 (-1.41--0.76)	41.70	-0.91 (-1.22--0.6)	41.23	-1.12 (-1.47--0.77)	27.15	-1.28 (-1.61--0.95)
Syria	106.30	-0.76 (-0.99--0.53)	120.20	-0.51 (-0.72--0.3)	96.14	-0.94 (-1.17--0.71)	90.53	-1.08 (-1.31--0.84)
Taiwan	166.66	-0.55 (-1.27-0.18)	188.59	-0.07 (-0.9-0.76)	150.35	-0.94 (-1.57--0.31)	106.56	-1.24 (-1.87--0.6)
Tajikistan	69.37	0.5 (0.32-0.68)	71.40	0.31 (0.11-0.51)	68.71	0.66 (0.51-0.82)	81.84	0.18 (-0.01-0.38)
Thailand	233.43	0.37 (0.26-0.47)	268.66	0.93 (0.84-1.02)	210.81	-0.04 (-0.16-0.08)	175.67	-0.06 (-0.17-0.05)
Timor-Leste	164.42	-0.32 (-0.6--0.03)	162.23	-0.17 (-0.46-0.13)	166.22	-0.41 (-0.68--0.13)	119.61	-0.69 (-0.99--0.39)
Togo	117.66	-1.01 (-1.13--0.9)	123.43	-0.96 (-1.1--0.81)	115.33	-1.02 (-1.13--0.91)	121.23	-1.02 (-1.13--0.92)
Tokelau	-26.64	-1.04 (-1.07--1)	-19.47	-0.8 (-0.84--0.77)	-31.49	-1.22 (-1.26--1.19)	-29.80	-1.35 (-1.38--1.31)
Tonga	39.44	-0.27 (-0.42--0.13)	41.34	-0.12 (-0.27-0.02)	38.41	-0.39 (-0.53--0.25)	26.76	-0.43 (-0.56--0.3)
Trinidad and Tobago	-26.88	-4.41 (-5.06--3.75)	-24.74	-4.23 (-4.89--3.57)	-27.35	-4.48 (-5.13--3.83)	-30.21	-4.51 (-5.16--3.86)
Tunisia	145.04	-0.22 (-0.26--0.18)	157.28	0.04 (0-0.07)	135.58	-0.41 (-0.46--0.37)	118.86	-0.47 (-0.51--0.42)
Turkey	59.31	-1.58 (-1.68--1.48)	71.51	-1.26 (-1.35--1.16)	50.56	-1.83 (-1.94--1.71)	29.21	-2.3 (-2.4--2.19)
Turkmenistan	-14.87	-3.18 (-4.04--2.31)	-14.23	-3.09 (-4--2.16)	-14.78	-3.21 (-4.04--2.38)	-12.83	-3.09 (-4.01--2.17)
Tuvalu	12.66	-1.09 (-1.16--1.02)	16.85	-0.93 (-0.99--0.87)	9.96	-1.21 (-1.29--1.14)	2.50	-1.32 (-1.39--1.25)
Uganda	166.33	0.73 (0.58-0.89)	182.40	0.94 (0.79-1.09)	159.49	0.69 (0.55-0.83)	170.65	0.68 (0.49-0.86)
Ukraine	14.19	0.01 (-0.16-0.18)	20.58	0.37 (0.22-0.52)	8.63	-0.28 (-0.46--0.1)	8.30	-0.12 (-0.32-0.08)
United Arab Emirates	637.13	-1.56 (-2.07--1.05)	718.05	-1.37 (-1.83--0.91)	576.38	-1.7 (-2.24--1.15)	662.49	-1.55 (-1.98--1.12)
UK	23.90	-0.31 (-0.53--0.09)	43.26	0.27 (0.08-0.45)	6.26	-0.93 (-1.18--0.68)	-3.49	-1.12 (-1.35--0.88)
Tanzania	135.16	0.32 (0.23-0.41)	140.77	0.44 (0.32-0.56)	134.45	0.3 (0.21-0.39)	131.62	0.26 (0.16-0.36)
USA	34.62	-0.87 (-0.91--0.84)	51.03	-0.44 (-0.51--0.37)	20.08	-1.29 (-1.36--1.23)	18.62	-1.29 (-1.35--1.22)
United States Virgin Islands	51.37	-1.34 (-1.77--0.91)	48.88	-1.24 (-1.66--0.81)	52.54	-1.42 (-1.85--0.99)	32.65	-1.47 (-1.92--1.02)
Uruguay	6.17	-1.07 (-1.15--0.99)	8.61	-0.86 (-0.94--0.78)	6.21	-1.19 (-1.26--1.12)	-3.20	-1.21 (-1.27--1.14)
Uzbekistan	100.58	0.83 (0.48-1.17)	110.58	0.68 (0.42-0.94)	92.69	0.92 (0.53-1.3)	131.43	0.7 (0.38-1.02)
Vanuatu	161.66	-0.35 (-0.5--0.21)	168.73	-0.25 (-0.42--0.09)	156.66	-0.43 (-0.57--0.29)	154.35	-0.4 (-0.57--0.24)
Venezuela	57.52	-2.63 (-2.97--2.3)	63.50	-2.45 (-2.77--2.13)	53.97	-2.76 (-3.1--2.41)	45.49	-2.83 (-3.18--2.48)
Vietnam	197.80	1.36 (1.16-1.55)	242.43	1.84 (1.63-2.06)	166.44	0.96 (0.79-1.14)	176.77	1.05 (0.84-1.26)
Yemen	155.23	-0.18 (-0.26--0.11)	163.80	-0.04 (-0.12-0.05)	151.73	-0.24 (-0.31--0.17)	148.94	-0.31 (-0.38--0.24)
Zambia	135.77	-0.03 (-0.11-0.05)	146.65	0.17 (0.13-0.21)	131.06	-0.07 (-0.16-0.02)	131.94	-0.18 (-0.3--0.06)

Zimbabwe	63.60	0.22 (0-0.44)	62.36	0.17 (-0.04-0.38)	63.73	0.4 (0.14-0.67)	73.34	0.63 (0.33-0.93)
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Supplementary Table S8. The percentage change of GBTC cases from 1990 to 2019 by SDI and age

Socio-demographic index (SDI)	Incidence				Prevalence				Deaths				DALYs			
	Number ×10 ³	in	2019	Percentage change in Absolute number (%)	Number ×10 ³	in	2019	Percentage change in Absolute number (%)	Number ×10 ³	in	2019	Percentage change in Absolute number (%)	Number ×10 ³	in	2019	Percentage change in Absolute number (%)
Global																
20-24 years	0.26			10.25	0.51			18.40	0.14			1.32	9.26			1.36
25-29 years	0.48			20.41	0.87			28.38	0.27			11.73	16.98			11.80
30-34 years	1.07			41.97	1.83			50.99	0.67			31.98	38.08			32.07
35-39 years	2.04			36.34	3.40			45.74	1.31			26.30	68.25			26.40
40-44 years	3.70			52.74	6.20			61.41	2.53			43.99	119.42			44.12
45-49 years	6.18			66.76	8.95			71.16	4.84			62.32	204.18			62.33
50-54 years	10.94			70.29	15.56			74.94	9.00			66.78	336.98			66.79
55-59 years	16.24			63.98	23.46			71.35	13.06			59.10	427.78			59.14
60-64 years	22.00			60.82	29.79			67.45	18.45			56.88	519.26			56.92
65-69 years	26.95			67.18	35.79			74.48	22.58			63.31	533.95			63.28
70-74 years	28.78			85.03	36.51			95.58	24.99			79.21	483.89			79.28
75-79 years	27.47			67.41	33.88			81.24	24.62			61.75	377.58			61.57
80-84 years	24.72			106.62	30.60			127.55	22.39			99.35	264.60			98.87
85-89 years	18.34			178.49	20.86			212.46	16.47			167.30	149.16			166.48
90-94 years	7.67			326.30	6.87			377.55	7.89			304.43	55.34			302.27
>95 years	2.38			594.78	1.24			602.75	3.23			562.14	16.76			541.80
Early-onset	13.72			52.36	21.77			58.55	9.76			46.47	456.17			44.45
Later-onset	185.49			87.78	234.57			95.49	162.68			84.46	3165.31			72.24
Total	199.21			84.82	256.34			91.69	172.44			81.79	3621.47			68.16
High SDI																
20-24 years	0.03			-17.65	0.08			-7.32	0.01			-38.46	0.55			-36.84
25-29 years	0.05			-26.87	0.12			-17.33	0.02			-41.38	1.05			-41.29

30-34 years	0.13	-16.46	0.32	-6.78	0.05	-31.08	2.91	-31.07
35-39 years	0.28	-17.92	0.67	-7.86	0.11	-32.14	5.97	-32.02
40-44 years	0.53	-23.00	1.23	-12.91	0.24	-35.29	11.48	-34.97
45-49 years	0.88	-16.35	1.64	-5.79	0.52	-26.69	21.97	-26.62
50-54 years	1.55	-15.27	2.76	-4.27	1.03	-24.63	38.69	-24.52
55-59 years	2.90	-6.94	5.36	8.23	1.85	-19.12	60.78	-18.93
60-64 years	4.44	-1.77	7.61	12.95	3.02	-13.04	85.11	-12.83
65-69 years	6.59	2.92	11.10	18.26	4.43	-8.33	105.03	-8.11
70-74 years	8.76	32.65	13.74	50.30	6.25	20.16	121.28	20.43
75-79 years	10.32	28.03	15.56	49.30	7.72	15.74	118.61	15.77
80-84 years	10.90	63.64	16.09	91.48	8.42	50.48	99.56	50.17
85-89 years	9.76	144.27	12.68	181.04	7.69	131.72	69.69	130.76
90-94 years	4.93	315.77	4.73	366.27	4.73	299.16	33.11	296.42
>95 years	1.79	665.38	0.94	674.38	2.33	646.47	12.03	620.98
Early-onset	1.90	-18.86	4.06	-8.87	0.95	-30.38	43.93	-30.55
Later-onset	61.94	45.38	90.56	57.31	47.46	38.64	743.87	14.82
Total	63.84	42.04	94.62	52.56	48.41	35.99	787.80	10.79
High-middle SDI								
20-24 years	0.04	-25.86	0.09	-14.15	0.02	-36.36	1.40	-37.73
25-29 years	0.10	-5.00	0.18	7.60	0.05	-19.35	3.11	-18.78
30-34 years	0.26	24.15	0.46	41.36	0.15	6.38	8.57	6.34
35-39 years	0.47	12.71	0.82	30.72	0.29	-4.36	14.83	-4.26
40-44 years	0.88	35.79	1.57	56.80	0.57	17.36	26.82	17.80
45-49 years	1.44	52.60	2.12	63.33	1.09	42.08	46.18	42.17
50-54 years	2.63	49.54	3.79	58.60	2.13	42.43	79.55	42.50
55-59 years	4.16	47.85	6.07	59.33	3.30	40.02	108.17	40.05
60-64 years	5.81	40.95	7.88	50.03	4.85	35.00	136.31	35.06
65-69 years	7.36	57.55	9.73	70.73	6.14	48.91	145.20	48.91
70-74 years	7.66	79.36	9.57	96.23	6.66	68.33	128.91	68.42
75-79 years	6.97	48.55	8.31	66.89	6.34	38.90	97.11	38.75
80-84 years	6.43	103.48	7.60	136.27	5.96	87.44	70.29	86.85

85-89 years	4.62	190.98	4.93	248.83	4.31	162.40	38.98	161.89
90-94 years	1.61	312.53	1.37	385.16	1.71	269.48	12.00	268.33
>95 years	0.35	410.29	0.18	414.29	0.49	368.27	2.59	361.61
Early-onset	3.19	34.16	5.24	48.64	2.17	21.25	100.91	18.90
Later-onset	47.59	72.86	59.44	85.98	41.87	64.39	819.11	53.29
Total	50.77	69.80	64.67	82.28	44.04	61.57	920.02	48.58

Middle SDI

20-24 years	0.08	-11.63	0.15	-0.68	0.04	-24.53	2.70	-23.76
25-29 years	0.15	8.21	0.26	23.47	0.08	-5.62	5.19	-5.76
30-34 years	0.32	41.67	0.53	63.00	0.21	22.62	11.74	22.90
35-39 years	0.62	40.64	0.99	64.29	0.41	19.82	21.10	20.18
40-44 years	1.13	83.79	1.84	119.19	0.79	56.55	37.20	56.94
45-49 years	1.88	110.07	2.60	126.37	1.51	95.33	63.53	95.47
50-54 years	3.37	125.74	4.62	139.65	2.84	114.77	106.10	114.89
55-59 years	4.72	121.85	6.43	139.91	3.95	109.50	129.27	109.53
60-64 years	6.11	129.07	7.72	146.49	5.37	117.21	150.84	117.25
65-69 years	6.97	151.75	8.36	175.28	6.24	136.02	147.31	135.94
70-74 years	6.77	159.47	7.54	185.10	6.40	142.94	123.84	142.94
75-79 years	5.83	174.61	6.01	206.89	5.86	155.63	89.73	155.08
80-84 years	4.45	241.52	4.36	284.83	4.67	215.55	55.10	215.14
85-89 years	2.54	286.74	2.18	334.66	2.77	255.58	25.07	255.54
90-94 years	0.73	400.68	0.52	451.06	0.92	360.30	6.43	358.92
>95 years	0.16	519.23	0.08	530.77	0.27	476.09	1.38	462.20
Early-onset	3.19	34.16	6.37	94.42	3.03	57.57	141.47	53.16
Later-onset	4.17	74.05	47.83	179.31	39.27	149.34	835.07	135.05
Total	41.64	161.63	54.20	165.67	42.30	139.38	976.54	118.15

Low-middle

20-24 years	0.08	77.78	0.14	86.84	0.05	68.97	3.25	68.05
25-29 years	0.14	86.30	0.22	97.35	0.09	78.00	5.51	76.52
30-34 years	0.26	114.75	0.39	128.24	0.19	103.23	10.78	103.88
35-39 years	0.49	123.39	0.69	137.72	0.37	110.34	19.04	110.16

40-44 years	0.85	144.38	1.17	161.61	0.68	130.51	32.04	130.60
45-49 years	1.48	143.00	1.92	151.11	1.26	136.26	53.28	136.22
50-54 years	2.57	159.70	3.34	166.88	2.27	154.94	84.91	154.87
55-59 years	3.39	149.04	4.27	157.26	2.99	143.60	97.85	143.68
60-64 years	4.28	142.21	5.02	150.42	3.95	137.46	111.03	137.41
65-69 years	4.59	172.46	5.05	184.50	4.37	166.30	103.27	166.08
70-74 years	4.27	177.32	4.34	190.37	4.30	171.06	83.24	170.94
75-79 years	3.36	191.23	3.12	207.29	3.61	183.66	55.36	182.84
80-84 years	2.34	260.90	2.04	279.00	2.65	250.93	31.31	249.60
85-89 years	1.15	320.96	0.87	337.00	1.36	309.94	12.34	309.22
90-94 years	0.32	442.37	0.21	459.46	0.43	429.27	3.05	429.74
>95 years	0.07	475.00	0.04	483.33	0.12	495.00	0.62	472.48
Early-onset	3.29	132.86	4.53	143.58	2.64	124.23	123.89	121.84
Later-onset	26.32	177.57	28.29	183.47	26.05	175.11	582.98	162.60
Total	29.60	171.77	32.82	177.20	28.68	169.46	706.87	154.41

Low SDI

20-24 years	0.03	175.00	0.06	175.00	0.02	150.00	1.36	151.02
25-29 years	0.05	127.27	0.08	146.88	0.03	126.67	2.11	124.42
30-34 years	0.10	150.00	0.13	162.75	0.07	136.67	4.06	139.55
35-39 years	0.18	143.84	0.24	158.06	0.14	137.29	7.27	136.37
40-44 years	0.30	157.76	0.39	172.22	0.25	146.08	11.82	146.71
45-49 years	0.52	137.61	0.66	144.44	0.45	132.82	19.13	132.21
50-54 years	0.82	130.25	1.05	137.10	0.74	126.77	27.59	126.78
55-59 years	1.07	120.37	1.32	127.19	0.96	115.92	31.52	115.91
60-64 years	1.35	127.06	1.55	134.95	1.27	123.77	35.75	123.73
65-69 years	1.44	144.05	1.53	154.82	1.39	139.11	32.95	138.89
70-74 years	1.33	149.25	1.30	161.12	1.37	144.80	26.44	144.40
75-79 years	0.98	165.31	0.87	178.85	1.08	161.20	16.64	160.30
80-84 years	0.60	219.89	0.50	234.46	0.70	214.93	8.25	214.25
85-89 years	0.27	287.14	0.20	302.04	0.33	282.76	3.03	282.55
90-94 years	0.07	362.50	0.05	360.00	0.10	352.17	0.73	352.17

>95 years	0.01	366.67	0.01	600.00	0.03	400.00	0.14	403.70
Early-onset	1.17	144.89	1.56	155.74	0.97	137.16	45.75	137.27
Later-onset	7.94	147.91	8.37	153.34	7.97	146.77	183.02	136.62
Total	9.11	147.50	9.93	153.87	8.95	145.81	228.77	136.75

Supplementary Table S9. The percentage change of GBTC cases from 1990 to 2019 by SDI and age in females

Socio-demographic index (SDI)	Incidence				Prevalence				Deaths				DALYs			
	Number ×10 ³	in	2019	Percentage change in Absolute number (%)	Number ×10 ³	in	2019	Percentage change in Absolute number (%)	Number ×10 ³	in	2019	Percentage change in Absolute number (%)	Number ×10 ³	in	2019	Percentage change in Absolute number (%)
High SDI																
20-24 years	0.01			-23.53	0.04			-10.26	0.004			-42.86	0.28			-40.94
25-29 years	0.02			-32.26	0.06			-20.29	0.01			-42.86	0.48			-45.48
30-34 years	0.05			-25.35	0.13			-14.67	0.02			-41.67	1.23			-40.23
35-39 years	0.12			-24.38	0.29			-12.23	0.05			-39.29	2.68			-38.73
40-44 years	0.24			-25.54	0.55			-14.80	0.11			-38.33	5.27			-37.96
45-49 years	0.40			-23.22	0.80			-13.30	0.25			-32.14	10.44			-32.03
50-54 years	0.72			-22.63	1.27			-14.47	0.50			-29.49	18.58			-29.38
55-59 years	1.33			-17.06	2.28			-5.72	0.88			-26.67	28.79			-26.53
60-64 years	2.07			-16.11	3.36			-5.51	1.45			-24.69	40.80			-24.49
65-69 years	3.03			-18.26	4.85			-7.69	2.09			-26.54	49.55			-26.36
70-74 years	4.08			3.68	6.35			16.63	2.97			-5.38	57.65			-5.12
75-79 years	5.11			0.65	7.43			16.73	3.87			-9.51	59.34			-9.45
80-84 years	5.86			29.47	8.34			50.16	4.53			18.49	53.39			18.28
85-89 years	5.91			105.63	7.54			138.14	4.62			92.27	41.76			91.37
90-94 years	3.49			284.34	3.37			343.36	3.26			259.82	22.80			257.32
>95 years	1.47			659.28	0.77			671.00	1.85			624.71	9.52			599.12
Early-onset	0.85			-24.44	1.85			-13.85	0.44			-35.47	20.38			-35.59
Later-onset	33.07			26.12	45.56			33.61	26.01			21.15	382.18			-1.45
Total	33.92			24.04	47.41			30.80	26.45			19.41	402.56			-4.03
High-middle SDI																
20-24 years	0.02			-25.81	0.05			-15.52	0.01			-38.89	0.73			-38.21
25-29 years	0.04			-18.87	0.09			-5.38	0.02			-30.30	1.41			-29.93

30-34 years	0.10	-1.01	0.18	14.29	0.06	-16.18	3.25	-15.71
35-39 years	0.20	-4.76	0.36	11.73	0.12	-19.33	6.32	-19.13
40-44 years	0.39	10.76	0.68	28.84	0.25	-4.92	11.82	-4.81
45-49 years	0.71	28.52	1.13	40.62	0.55	19.26	23.02	19.44
50-54 years	1.33	26.64	1.97	35.35	1.08	20.29	40.37	20.25
55-59 years	2.16	27.06	3.04	35.41	1.73	20.53	56.52	20.62
60-64 years	3.16	20.11	4.19	26.23	2.65	15.55	74.58	15.62
65-69 years	4.05	30.93	5.23	40.06	3.41	24.44	80.41	24.42
70-74 years	4.25	48.88	5.36	62.68	3.72	40.03	71.82	40.17
75-79 years	3.96	20.94	4.66	34.73	3.61	13.26	55.25	13.09
80-84 years	3.86	69.06	4.42	92.92	3.58	56.36	42.14	55.93
85-89 years	2.88	144.35	2.99	189.36	2.68	120.53	24.16	119.98
90-94 years	1.19	287.25	1.00	355.71	1.25	244.88	8.74	243.40
>95 years	0.28	405.36	0.15	403.45	0.39	358.14	2.09	348.50
Early-onset	1.47	12.85	2.49	26.73	1.01	1.82	46.55	-0.02
Later-onset	27.11	47.15	33.00	56.57	24.08	40.40	456.07	30.06
Total	28.58	44.89	35.49	54.03	25.09	38.31	502.62	26.53
Middle SDI								
20-24 years	0.04	-18.37	0.08	-8.24	0.02	-26.67	1.45	-28.14
25-29 years	0.08	-1.28	0.14	10.94	0.05	-13.46	2.80	-13.09
30-34 years	0.15	25.00	0.25	42.44	0.09	9.30	5.38	10.18
35-39 years	0.29	25.76	0.47	45.37	0.19	9.04	10.04	9.15
40-44 years	0.52	56.33	0.81	81.94	0.37	35.66	17.40	36.12
45-49 years	0.95	83.59	1.40	98.31	0.77	72.32	32.54	72.12
50-54 years	1.79	101.58	2.50	113.68	1.51	92.87	56.65	92.92
55-59 years	2.49	96.61	3.27	109.74	2.10	86.73	68.62	86.80
60-64 years	3.37	106.63	4.19	120.59	2.97	96.88	83.31	96.82
65-69 years	3.91	127.15	4.64	147.05	3.50	113.68	82.57	113.58
70-74 years	3.79	132.19	4.28	155.46	3.58	117.70	69.17	117.79
75-79 years	3.29	143.05	3.38	171.38	3.29	126.20	50.30	125.76
80-84 years	2.66	210.04	2.57	249.59	2.77	186.44	32.62	185.94

85-89 years	1.55	253.08	1.32	297.29	1.68	223.75	15.15	223.58
90-94 years	0.49	390.00	0.35	447.62	0.61	351.11	4.27	350.11
>95 years	0.12	505.26	0.06	490.00	0.19	466.67	0.98	453.11
Early-onset	2.02	52.80	3.15	69.14	1.50	40.38	69.60	36.47
Later-onset	23.44	136.71	26.56	151.26	22.18	126.32	463.63	112.34
Total	25.45	126.78	29.70	138.94	23.68	117.94	533.24	97.97

Low-middle

20-24 years	0.06	78.13	0.10	87.04	0.04	75.00	2.35	73.32
25-29 years	0.10	88.24	0.16	96.25	0.06	77.78	3.95	79.13
30-34 years	0.16	111.69	0.24	122.02	0.12	103.39	6.86	102.75
35-39 years	0.30	118.98	0.43	130.98	0.23	109.09	11.98	108.91
40-44 years	0.52	144.34	0.69	159.18	0.43	134.81	20.00	134.96
45-49 years	0.93	141.82	1.27	148.63	0.81	137.35	33.98	137.06
50-54 years	1.69	170.03	2.22	175.97	1.50	166.67	55.99	166.71
55-59 years	2.15	152.00	2.64	158.68	1.91	148.18	62.41	148.42
60-64 years	2.77	153.30	3.21	160.60	2.57	150.10	72.12	150.07
65-69 years	2.93	181.08	3.18	191.21	2.79	176.53	65.97	176.42
70-74 years	2.73	182.97	2.79	194.61	2.75	178.06	53.22	178.11
75-79 years	2.09	193.82	1.93	208.32	2.25	187.61	34.49	186.73
80-84 years	1.52	271.64	1.31	290.72	1.72	263.42	20.33	262.64
85-89 years	0.73	320.69	0.55	336.51	0.87	309.95	7.84	310.15
90-94 years	0.21	444.74	0.13	454.17	0.28	426.42	1.95	424.46
>95 years	0.05	466.67	0.03	550.00	0.09	480.00	0.45	460.49
Early-onset	2.07	130.98	2.89	139.62	1.68	125.34	79.11	122.72
Later-onset	16.85	184.93	17.97	189.62	16.71	183.80	374.76	171.66
Total	18.92	177.83	20.85	181.40	18.40	177.30	453.87	161.64

Low SDI

20-24 years	0.02	133.33	0.04	164.29	0.01	116.67	0.90	133.68
25-29 years	0.04	125.00	0.06	137.50	0.03	108.33	1.53	114.27
30-34 years	0.06	142.31	0.09	160.00	0.05	128.57	2.76	133.47
35-39 years	0.12	141.67	0.16	154.84	0.09	132.50	4.83	134.06

40-44 years	0.19	162.16	0.25	178.65	0.17	153.85	7.78	154.20
45-49 years	0.34	141.55	0.46	147.83	0.30	138.58	12.77	137.64
50-54 years	0.55	141.85	0.71	147.39	0.49	139.32	18.46	139.22
55-59 years	0.70	132.01	0.85	138.31	0.63	129.35	20.72	129.02
60-64 years	0.89	147.90	1.01	155.73	0.83	145.00	23.42	145.12
65-69 years	0.92	166.18	0.97	176.92	0.90	163.24	21.14	162.61
70-74 years	0.85	172.35	0.84	184.35	0.87	169.14	16.87	168.77
75-79 years	0.62	186.05	0.54	201.12	0.68	183.75	10.44	182.24
80-84 years	0.39	247.75	0.31	263.95	0.45	244.27	5.34	242.33
85-89 years	0.17	295.35	0.12	313.79	0.21	292.45	1.88	287.65
90-94 years	0.05	327.27	0.03	383.33	0.07	340.00	0.46	337.14
>95 years	0.01	450.00	0.01	500.00	0.02	375.00	0.10	415.00
Early-onset	0.77	145.40	1.05	156.62	0.65	138.75	30.57	139.21
Later-onset	5.13	166.56	5.38	171.38	5.15	167.03	118.82	155.48
Total	5.91	163.63	6.42	168.67	5.80	163.55	149.39	151.97

Supplementary Table S10. The percentage change of GBTC cases from 1990 to 2019 by SDI and age in males

Socio-demographic index (SDI)	Incidence				Prevalence				Deaths				DALYs			
	Number ×10 ³	in	2019	Percentage change in Absolute number (%)	Number ×10 ³	in	2019	Percentage change in Absolute number (%)	Number ×10 ³	in	2019	Percentage change in Absolute number (%)	Number ×10 ³	in	2019	Percentage change in Absolute number (%)
High SDI																
20-24 years	0.02			-11.76	0.04			-2.38	0.004			-33.33	0.28			-32.10
25-29 years	0.03			-22.22	0.07			-14.81	0.01			-35.71	0.56			-37.17
30-34 years	0.08			-9.20	0.19			-1.05	0.03			-23.68	1.69			-22.31
35-39 years	0.16			-12.37	0.38			-4.27	0.06			-25.00	3.29			-25.31
40-44 years	0.29			-20.72	0.68			-11.33	0.13			-32.47	6.21			-32.19
45-49 years	0.48			-9.16	0.85			2.54	0.27			-21.16	11.53			-20.91
50-54 years	0.83			-7.68	1.49			6.60	0.54			-19.52	20.11			-19.39
55-59 years	1.57			3.70	3.09			21.49	0.97			-10.82	31.98			-10.62
60-64 years	2.37			15.49	4.24			33.63	1.57			1.36	44.32			1.61
65-69 years	3.56			32.14	6.25			51.25	2.34			17.81	55.48			18.02
70-74 years	4.67			75.44	7.40			99.81	3.28			59.21	63.63			59.31
75-79 years	5.22			74.54	8.13			100.42	3.85			60.79	59.27			60.55
80-84 years	5.04			136.11	7.75			172.00	3.89			119.14	46.17			118.19
85-89 years	3.85			243.48	5.13			282.20	3.07			235.52	27.92			233.34
90-94 years	1.45			417.92	1.35			435.18	1.47			427.34	10.31			423.03
>95 years	0.32			695.00	0.17			685.71	0.48			743.86	2.50			718.30
Early-onset	1.05			-13.53	2.21			-4.25	0.51			-25.40	23.55			-25.49
Later-onset	28.87			76.21	45.00			91.73	21.45			68.03	361.69			39.10
Total	29.91			70.02	47.21			83.14	21.96			63.31	385.24			32.10
High-middle SDI																
20-24 years	0.02			-25.00	0.04			-14.29	0.01			-37.50	0.67			-37.20
25-29 years	0.05			8.51	0.10			23.08	0.03			-6.90	1.69			-6.32

30-34 years	0.16	47.22	0.27	68.10	0.09	25.68	5.32	26.59
35-39 years	0.27	30.43	0.46	50.66	0.16	10.14	8.51	10.84
40-44 years	0.49	65.77	0.89	87.95	0.32	44.55	15.00	44.91
45-49 years	0.72	87.08	0.99	101.02	0.55	75.40	23.17	75.33
50-54 years	1.30	83.83	1.82	94.96	1.05	75.97	39.18	76.04
55-59 years	2.00	79.51	3.03	93.62	1.58	70.01	51.65	70.00
60-64 years	2.65	77.56	3.69	91.00	2.19	69.40	61.73	69.49
65-69 years	3.32	109.54	4.50	128.93	2.74	97.33	64.79	97.06
70-74 years	3.40	141.01	4.21	166.08	2.95	126.00	57.09	125.63
75-79 years	3.01	112.52	3.66	139.80	2.72	98.54	41.85	98.05
80-84 years	2.57	192.83	3.18	243.04	2.38	167.30	28.15	165.78
85-89 years	1.74	325.18	1.94	410.82	1.63	281.07	14.83	279.74
90-94 years	0.43	403.53	0.38	476.92	0.46	357.43	3.27	356.92
>95 years	0.07	490.91	0.03	466.67	0.09	447.06	0.50	427.66
Early-onset	1.72	59.91	2.75	76.30	1.16	45.00	54.36	41.88
Later-onset	20.48	124.91	26.44	142.93	17.79	113.92	363.04	97.64
Total	22.20	118.07	29.18	134.60	18.95	107.88	417.39	88.02
Middle SDI								
20-24 years	0.04	-2.70	0.07	11.29	0.02	-17.39	1.25	-17.97
25-29 years	0.07	21.43	0.12	42.35	0.04	2.70	2.39	4.64
30-34 years	0.18	58.93	0.29	85.81	0.11	36.59	6.36	36.14
35-39 years	0.33	56.94	0.52	87.00	0.21	31.68	11.06	32.32
40-44 years	0.62	115.79	1.03	160.86	0.42	81.03	19.80	81.29
45-49 years	0.93	147.20	1.20	170.81	0.73	127.95	31.00	127.91
50-54 years	1.58	161.32	2.12	179.79	1.32	146.92	49.44	147.13
55-59 years	2.23	159.12	3.16	181.96	1.85	143.04	60.65	142.97
60-64 years	2.74	164.32	3.53	186.29	2.40	148.96	67.53	149.16
65-69 years	3.06	192.17	3.72	221.05	2.74	172.27	64.74	172.29
70-74 years	2.98	205.43	3.26	236.67	2.83	184.78	54.67	184.50
75-79 years	2.54	229.96	2.64	269.19	2.57	206.56	39.43	205.74
80-84 years	1.79	302.02	1.79	350.25	1.90	271.09	22.48	269.96

85-89 years	0.99	354.84	0.86	407.65	1.09	318.77	9.92	318.69
90-94 years	0.24	412.77	0.17	461.29	0.31	379.69	2.17	378.37
>95 years	0.05	557.14	0.02	500.00	0.08	500.00	0.40	485.51
Early-onset	2.15	100.37	3.23	127.66	1.54	79.11	71.86	73.73
Later-onset	18.20	202.69	21.28	224.61	17.08	187.27	371.44	171.26
Total	20.36	187.18	24.50	207.38	18.62	173.66	443.30	148.64

Low-middle

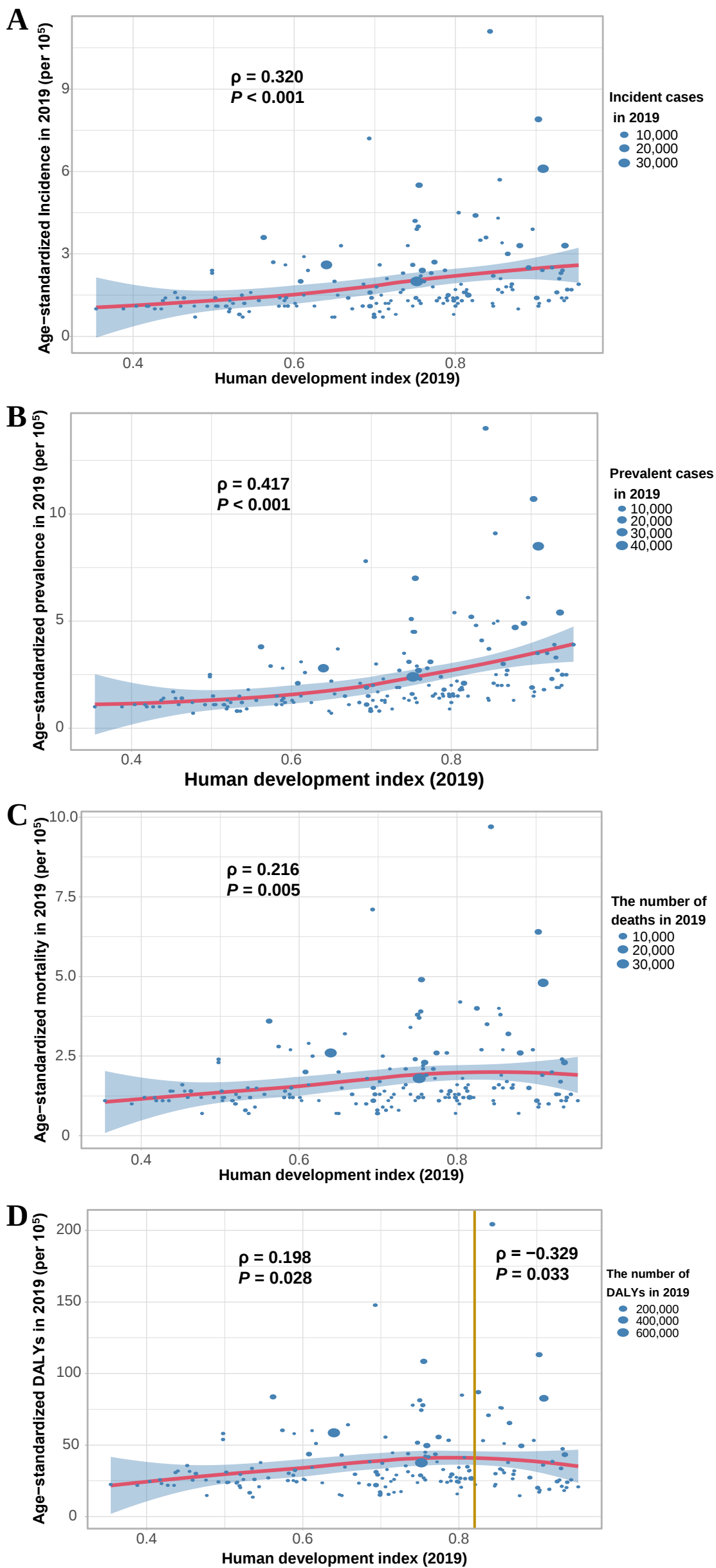
20-24 years	0.02	64.29	0.04	86.36	0.01	44.44	0.90	55.46
25-29 years	0.04	86.36	0.07	100.00	0.03	66.67	1.56	70.26
30-34 years	0.10	120.00	0.15	139.34	0.07	109.09	3.92	105.88
35-39 years	0.19	130.86	0.26	149.52	0.14	112.50	7.06	112.20
40-44 years	0.33	142.65	0.48	165.75	0.26	124.56	12.05	123.72
45-49 years	0.54	145.05	0.65	156.08	0.46	134.36	19.30	134.76
50-54 years	0.89	142.08	1.12	150.78	0.77	134.95	28.92	134.71
55-59 years	1.24	144.09	1.63	154.60	1.08	135.73	35.44	135.76
60-64 years	1.51	124.22	1.81	134.54	1.38	117.11	38.91	117.06
65-69 years	1.67	158.54	1.87	173.75	1.58	149.92	37.30	149.57
70-74 years	1.54	168.35	1.55	183.03	1.55	159.46	30.02	159.07
75-79 years	1.26	187.70	1.19	205.38	1.36	177.35	20.87	176.64
80-84 years	0.81	240.59	0.73	261.58	0.93	228.72	10.98	227.75
85-89 years	0.41	321.43	0.32	337.84	0.50	309.09	4.50	307.60
90-94 years	0.11	465.00	0.07	469.23	0.16	437.93	1.10	442.08
>95 years	0.02	500.00	0.01	800.00	0.03	540.00	0.17	507.14
Early-onset	1.22	135.38	1.65	150.99	0.96	122.33	44.79	120.27
Later-onset	9.46	165.47	10.32	173.49	9.33	160.70	208.22	147.74
Total	10.69	161.66	11.97	170.15	10.29	156.52	253.01	142.39

Low SDI

20-24 years	0.01	175.00	0.02	200.00	0.01	250.00	0.46	194.19
25-29 years	0.01	180.00	0.02	175.00	0.01	125.00	0.58	156.39
30-34 years	0.03	166.67	0.04	175.00	0.02	155.56	1.30	153.50
35-39 years	0.06	148.00	0.08	164.52	0.05	135.00	2.44	140.83

40-44 years	0.11	144.19	0.14	166.67	0.09	132.43	4.04	133.47
45-49 years	0.17	128.95	0.20	138.82	0.15	122.06	6.36	122.00
50-54 years	0.27	111.63	0.34	118.06	0.24	105.04	9.12	105.17
55-59 years	0.37	101.09	0.47	109.29	0.33	94.12	10.80	94.56
60-64 years	0.47	96.62	0.55	104.48	0.44	92.11	12.33	91.92
65-69 years	0.51	111.52	0.56	123.90	0.50	106.20	11.81	105.62
70-74 years	0.48	116.74	0.47	127.80	0.49	111.11	9.58	110.79
75-79 years	0.37	137.01	0.33	148.87	0.40	130.29	6.20	130.13
80-84 years	0.21	180.00	0.18	193.55	0.25	175.28	2.91	173.40
85-89 years	0.10	277.78	0.08	285.00	0.13	281.82	1.14	274.43
90-94 years	0.03	350.00	0.02	466.67	0.04	375.00	0.27	378.57
>95 years	0.00	200.00	0.002	NA	0.01	500.00	0.03	371.43
Early-onset	0.40	141.21	0.51	156.50	0.32	130.71	15.18	133.39
Later-onset	2.81	119.98	2.997	126.53	2.82	117.32	64.20	108.18
Total	3.21	122.41	3.51	130.62	3.15	118.69	79.38	112.58

Supplementary Figure S1



Supplementary Figure S2

