

SUPPLEMENTARY TABLE 1. Age-Standardized Incidence (ASIR), Prevalence (ASPR), Mortality (ASMR), and DALY Rates (ASDR) of Rheumatoid Arthritis Among Middle-Aged Adults (MAA) in 2021, with Average Annual Percentage Change (AAPC) from 1990 to 2021, Stratified by Global Level, SDI Quintiles, and GBD Regions.

Location	ASIR			ASPR			ASMR			ASDR		
	1990 (per 100, 000 population, 95% UI)	2021 (per 100, 000 population, 95% UI)	AAPCs (95% CI)	1990 (per 100, 000 population, 95% UI)	2021 (per 100, 000 population, 95% UI)	AAPCs (95% CI)	1990 (per 100, 000 population, 95% UI)	2021 (per 100, 000 population, 95% UI)	AAPCs (95% CI)	1990 (per 100, 000 population, 95% UI)	2021 (per 100, 000 population, 95% UI)	AAPCs (95% CI)
Global	18.14 (11.61 to 26.26)	19.53 (12.6 to 27.98)	0.24* (0.23 to 0.25)	323.99 (260.33 to 395.49)	368.73 (298.9 to 446.08)	0.43* (0.42 to 0.44)	0.33 (0.29 to 0.37)	0.19 (0.16 to 0.22)	-1.70* (-1.75 to -1.65)	55.85 (40.49 to 75.76)	56.74 (39.44 to 78.91)	0.05* (0.04 to 0.06)
SDI												
High SDI	31.15 (20.64 to 43.14)	30.93 (20.95 to 42.29)	-0.02 (-0.06 to 0.01)	453.09 (363.71 to 551.12)	488.09 (399.87 to 582.65)	0.23* (0.22 to 0.25)	0.37 (0.36 to 0.38)	0.15 (0.15 to 0.16)	-2.71* (-2.96 to -2.52)	74.49 (53.16 to 101.37)	70.99 (49 to 99.43)	-0.18* (-0.2 to -0.15)
High-middle SDI	16.76 (10.47 to 24.57)	20.05 (12.79 to 28.77)	0.58* (0.56 to 0.58)	336.55 (270.22 to 408.07)	408.85 (331.76 to 492.05)	0.64* (0.63 to 0.65)	0.36 (0.32 to 0.42)	0.20 (0.17 to 0.23)	-2.02* (-2.15 to -1.89)	59.09 (43.12 to 79.98)	62.58 (42.82 to 87.8)	0.17* (0.15 to 0.19)
Middle SDI	15.72 (9.51 to 23.57)	18.57 (11.5 to 27.27)	0.54* (0.53 to 0.55)	326.58 (259.43 to 398.96)	385.75 (311.13 to 466.68)	0.56* (0.55 to 0.57)	0.39 (0.32 to 0.46)	0.25 (0.20 to 0.29)	-1.36* (-1.43 to -1.30)	58.84 (43.01 to 79.44)	61.41 (43.19 to 85.24)	0.14* (0.13 to 0.16)
Low-middle SDI	11.43 (7.01 to 17.09)	15.00 (9.46 to 22.03)	0.90* (0.89 to 0.91)	206.43 (162.92 to 256.82)	271.06 (217.46 to 333.23)	0.89* (0.88 to 0.91)	0.20 (0.14 to 0.28)	0.17 (0.12 to 0.23)	-0.61* (-0.63 to -0.59)	35.16 (24.9 to 48.6)	42.32 (29.31 to 59.26)	0.61* (0.59 to 0.62)
Low SDI	9.21 (5.79 to 13.58)	11.10 (7.06 to 16.11)	0.60* (0.58 to 0.62)	155.95 (120.76 to 195.72)	185.92 (145.27 to 231.09)	0.58* (0.57 to 0.59)	0.10 (0.05 to 0.25)	0.08 (0.04 to 0.16)	-0.93* (-1.02 to -0.85)	24.64 (16.6 to 35.37)	27.64 (18.5 to 39.51)	0.39* (0.38 to 0.4)
GBD 21 regions												
Andean Latin America	16.30 (9.61 to 24.46)	30.42 (18.69 to 44.32)	2.11* (2.06 to 2.16)	499.99 (418.11 to 587.08)	840.65 (700.07 to 986.18)	1.70* (1.67 to 1.72)	0.38 (0.30 to 0.47)	0.26 (0.18 to 0.35)	-1.08* (-1.45 to -0.71)	81.82 (57.65 to 112.85)	122.77 (82.46 to 174.55)	1.32* (1.26 to 1.38)
Australasia	39.15 (25.28 to 55.96)	39.98 (24.79 to 57.77)	0.07* (0.04 to 0.09)	480.87 (364.06 to 607.45)	560.54 (425.95 to 701.63)	0.49* (0.46 to 0.52)	0.36 (0.31 to 0.41)	0.16 (0.14 to 0.19)	-2.44* (-2.66 to -2.22)	77.22 (51.71 to 110.49)	80.88 (51.49 to 118.87)	0.14* (0.11 to 0.17)
Caribbean	9.32 (5.42 to 14.12)	12.15 (7.27 to 18.2)	0.85* (0.84 to 0.86)	223.6 (178.05 to 273.05)	296.52 (237.25 to 356.82)	0.92* (0.91 to 0.93)	0.33 (0.25 to 0.44)	0.28 (0.21 to 0.39)	-0.51* (-0.77 to -0.32)	42.73 (30.67 to 58.22)	50.41 (35.88 to 70.15)	0.54* (0.49 to 0.58)
Central Asia	9.00 (5.25 to 13.43)	13.71 (8.58 to 19.71)	1.35* (1.32 to 1.37)	265.37 (219.75 to 310.47)	401.68 (339.75 to 466.86)	1.35* (1.33 to 1.37)	0.02 (0.02 to 0.03)	0.15 (0.12 to 0.17)	5.66* (4.54 to 6.92)	36.71 (23.66 to 53.42)	59.6 (40.41 to 84.09)	1.65* (1.54 to 1.76)
Central Europe	20.3 (13.62 to 27.69)	23.7 (15.98 to 32.3)	0.48* (0.47 to 0.49)	357.39 (287.13 to 428.55)	418.97 (336.8 to 507)	0.52* (0.51 to 0.52)	0.44 (0.42 to 0.46)	0.12 (0.11 to 0.13)	-4.09* (-4.46 to -3.83)	64.12 (47.33 to 86.51)	60.61 (40.73 to 87.32)	-0.18* (-0.21 to -0.14)
Central Latin America	30.01 (18.92 to 42.54)	36.97 (24.2 to 50.97)	0.69* (0.67 to 0.70)	595.43 (482.07 to 708.71)	767.06 (637.14 to 899.88)	0.81* (0.80 to 0.82)	0.86 (0.82 to 0.91)	0.79 (0.68 to 0.94)	-0.52* (-0.72 to -0.32)	112.62 (84.98 to 148.7)	132.35 (97.43 to 177.43)	0.53* (0.46 to 0.58)
Central Sub-Saharan Africa	11.16 (7.4 to 15.46)	13.92 (9.42 to 19.17)	0.69* (0.68 to 0.70)	177.98 (139.93 to 219.11)	213.81 (170.88 to 260.23)	0.57* (0.56 to 0.58)	0.05 (0.01 to 0.56)	0.03 (0.01 to 0.32)	-2.05* (-2.09 to -2.01)	25.45 (15.3 to 46.03)	29.34 (17.83 to 45.22)	0.45* (0.43 to 0.46)
East Asia	20.54 (12.46 to 30.93)	22.72 (14.14 to 33.27)	0.33* (0.32 to 0.33)	390.16 (305.99 to 481.9)	445.59 (355.55 to 543.59)	0.45* (0.44 to 0.46)	0.48 (0.38 to 0.62)	0.26 (0.19 to 0.33)	-2.06* (-2.16 to -1.95)	71.44 (51.7 to 97.55)	70.34 (48.51 to 98.7)	-0.03 (-0.06 to 0.01)
Eastern Europe	11.99 (7.34 to 17.25)	14.34 (8.91 to 20.38)	0.57* (0.56 to 0.59)	327.43 (271.41 to 385.62)	396.85 (332.47 to 464.49)	0.64* (0.63 to 0.65)	0.51 (0.48 to 0.54)	0.40 (0.36 to 0.45)	-0.46 (-1.06 to 0.01)	62.8 (47.88 to 81.79)	68.08 (49.99 to 91.42)	0.27* (0.16 to 0.4)
Eastern Sub-Saharan Africa	9.82 (6.36 to 14.05)	10.82 (7.11 to 15.32)	0.33* (0.30 to 0.36)	149.37 (115.34 to 187.1)	166.79 (129.31 to 208.23)	0.38* (0.35 to 0.40)	0.03 (0.01 to 0.27)	0.01 (0.01 to 0.15)	-2.50* (-2.55 to -2.45)	21.2 (13.37 to 32.24)	22.88 (14.71 to 33.64)	0.26* (0.24 to 0.28)
High-income Asia Pacific	38.69 (24.68 to 55.4)	31.57 (20.17 to 44.61)	-0.65* (-0.71 to -0.61)	493.44 (375.46 to 626.26)	472.15 (366.35 to 587.38)	-0.14* (-0.19 to -0.11)	0.43 (0.41 to 0.47)	0.11 (0.1 to 0.12)	-4.16* (-4.43 to -3.92)	82.87 (58.2 to 114.76)	68.26 (44.88 to 99.55)	-0.62* (-0.66 to -0.59)
High-income North America	29.76 (20.7 to 39.68)	34.87 (24.69 to 45.89)	0.53* (0.51 to 0.54)	430.07 (362.07 to 503.60)	521.98 (443.51 to 602.7)	0.65* (0.63 to 0.67)	0.28 (0.27 to 0.30)	0.18 (0.17 to 0.20)	-1.47* (-1.6 to -1.35)	67.8 (48.46 to 92.6)	75.73 (53.3 to 104.67)	0.38* (0.34 to 0.41)
North Africa and Middle East	5.47 (3.20 to 8.23)	8.31 (4.96 to 12.27)	1.38* (1.36 to 1.39)	155.02 (126.75 to 185.47)	232.04 (191.06 to 273.27)	1.32* (1.29 to 1.34)	0.15 (0.10 to 0.21)	0.10 (0.07 to 0.13)	-1.43* (-1.47 to -1.39)	26.5 (18.87 to 36.81)	34.59 (23.29 to 49.03)	0.86* (0.84 to 0.87)
Oceania	3.16 (1.76 to 4.95)	3.73 (2.13 to 5.72)	0.54* (0.53 to 0.55)	82.32 (63.79 to 104.37)	98.03 (76.9 to 121.53)	0.57* (0.56 to 0.58)	0.01 (0 to 0.02)	0.01 (0 to 0.02)	0.89* (0.77 to 1.01)	11.57 (6.84 to 17.84)	13.66 (8.17 to 20.85)	0.54* (0.52 to 0.55)
South Asia	13.72 (8.25 to 20.88)	18.91 (11.53 to 28.35)	1.06* (1.05 to 1.07)	229.4 (178.62 to 290.63)	308.17 (240.44 to 388.35)	0.98* (0.96 to 0.99)	0.20 (0.11 to 0.29)	0.14 (0.09 to 0.22)	-0.96* (-0.99 to -0.92)	37.64 (26.07 to 52.94)	46.08 (31.06 to 66.07)	0.66* (0.65 to 0.68)
Southeast Asia	5.37 (3.15 to 8.25)	7.39 (4.42 to 11.13)	1.02* (1.01 to 1.04)	104.55 (79.22 to 132.32)	137.27 (104.6 to 173.11)	0.87* (0.85 to 0.88)	0.10 (0.07 to 0.14)	0.07 (0.05 to 0.10)	-0.98* (-1.01 to -0.95)	18.25 (12.37 to 26.29)	21.65 (14.41 to 31.23)	0.54* (0.52 to 0.55)
Southern Latin America	15.62 (9.65 to 22.42)	27.07 (17.13 to 37.81)	1.80* (1.78 to 1.81)	318.92 (253.18 to 387.59)	532.33 (431.06 to 636.26)	1.67* (1.66 to 1.68)	0.51 (0.45 to 0.57)	0.33 (0.29 to 0.37)	-1.55* (-1.91 to -1.29)	61.99 (45.77 to 84.03)	83.39 (58.18 to 117.96)	0.95* (0.88 to 1.01)
Southern Sub-Saharan Africa	15.62 (8.85 to 24.1)	16.09 (9.38 to 24.21)	0.10* (0.08 to 0.12)	598.96 (501.78 to 701.27)	535.15 (449.35 to 628.07)	-0.38* (-0.40 to -0.36)	0.96 (0.7 to 1.19)	0.68 (0.53 to 0.87)	-1.12* (-1.30 to -0.99)	117.19 (88.21 to 152.31)	95.76 (71.16 to 126.02)	-0.69* (-0.76 to -0.63)
Tropical Latin America	8.44 (4.62 to 13.55)	8.53 (4.87 to 13.29)	0.02 (-0.03 to 0.06)	322.08 (259.6 to 388.5)	321.04 (262.75 to 384.36)	-0.05 (-0.14 to 0.01)	0.24 (0.22 to 0.25)	0.23 (0.22 to 0.26)	-0.42* (-0.7 to -0.18)	51.78 (36.87 to 71.68)	51.49 (36.45 to 71.18)	-0.07* (-0.15 to -0.01)
Western Europe	28.24 (18.61 to 39.92)	30.5 (20.57 to 42.55)	0.24* (0.22 to 0.26)	432.26 (342.66 to 533.2)	489.65 (391.48 to 597.41)	0.40* (0.38 to 0.41)	0.28 (0.27 to 0.29)	0.13 (0.13 to 0.14)	-2.33* (-2.53 to -2.13)	68.47 (47.67 to 94.53)	70.48 (47.21 to 100.24)	0.10* (0.08 to 0.12)
Western Sub-Saharan Africa	91.29 (68.23 to 118)	118.27 (90.63 to 149.36)	0.68* (0.66 to 0.71)	4.5 (2.5 to 6.97)	5.54 (3.18 to 8.5)	0.84* (0.82 to 0.85)	0.01 (0 to 0.02)	0.01 (0 to 0.02)	-1.07* (-1.12 to -1.02)	12.54 (7.77 to 19.24)	16.05 (9.97 to 23.97)	0.80* (0.78 to 0.81)

ASIR, age-standardized incidence rate; ASMR, age-standardized mortality rate; ASPR, age-standardized prevalence rate; ASDR, age-standardized disability-adjusted life years rate; AAPC, average annual percentage change; UI, uncertainty interval; CI, confidence interval; DALY, disability-adjusted life years; SDI, sociodemographic index; GBD, Global Burden of Disease. *Significantly different from 0 at alpha = 0.05 ($p < 0.05$).