

Supplementary Appendix
Global epidemiology and burden of osteoporosis among postmenopausal women:
insights from the Global Burden of Disease Study 2021

Haofeng Liang^{1,2,3,†}, Shibo Chen^{2†}, Meiling Shi^{4†}, Jialiang Xu⁵, Chenxi Zhao⁵,
Bingsheng Yang^{2*}, Sikuan Zheng^{6*}, Jianye Tan^{2,6*}

1. Department of Orthopedics, Huizhou Central People's Hospital, Huizhou, China
2. Department of Joint and Orthopedics, Zhujiang Hospital, Southern Medical University, Guangzhou, China
3. Hui Zhou-Hong Kong Bone Health Joint Research Center, Huizhou, China
4. Department of Anesthesiology, The First Affiliated Hospital of USTC, Division of Life Sciences and Medicine, University of Science and Technology of China, Hefei, China
5. Queen Mary College, Jiangxi Medical College, Nanchang University, Nanchang, Jiangxi, China.
6. Department of Orthopaedics, The Second Affiliated Hospital, Jiangxi Medical College, Nanchang University, Nanchang, China

†These authors share first authorship.

*** Corresponding Author**

Dr. Bingsheng Yang

E-mail: ybs0626@163.com

Dr. Sikuan Zheng

E-mail: 821123406@qq.com

Dr. Jianye Tan

E-mail: tjytzy@126.com

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Table 1. Age-standardised deaths rates and DALY rates in 1990 and 2021, and their EAPC from 1990 to 2021 for LBMD among PWM, by country.

Countries	Age-standardised deaths rate, 1990	Age-standardised deaths rate, 2021	EAPC of deaths rate No. (95% CI)	Age-standardised DALYs rate, 1990	Age-standardised DALYs rate, 2021	EAPC of DALYs rate No. (95% CI)
Afghanistan	61.2040065	55.60974	-0.37 (-0.44 to -0.3)	1179.152	1046.077	-0.49 (-0.57 to -0.41)
Albania	8.690048865	6.350872	-0.71 (-0.9 to -0.52)	707.068	556.4868	-0.82 (-0.93 to -0.72)
Algeria	24.57199429	20.02776	-0.02 (-0.21 to 0.17)	763.0504	614.4868	-0.56 (-0.63 to -0.49)
American Samoa	21.60292686	24.41597	0.8 (0.67 to 0.92)	541.8891	586.3557	0.48 (0.41 to 0.55)
Andorra	36.37951831	22.96781	-1.29 (-1.46 to -1.11)	1833.511	1938.726	0.18 (0.13 to 0.24)
Angola	49.31743971	50.35571	-0.06 (-0.12 to 0)	1051.449	1023.321	-0.2 (-0.25 to -0.14)
Antigua and Barbuda	6.942611538	9.076585	0.58 (0.27 to 0.88)	275.5028	345.8673	0.66 (0.5 to 0.82)
Argentina	17.87388578	10.74393	-0.98 (-1.25 to -0.71)	838.9756	665.584	-0.55 (-0.62 to -0.47)
Armenia	10.79705629	6.549185	-0.92 (-1.32 to -0.53)	604.4162	344.7283	-1.54 (-1.95 to -1.13)
Australia	17.74416725	24.17894	2 (1.71 to 2.28)	1093.031	1269.136	0.83 (0.73 to 0.93)
Austria	35.36006921	21.60875	-0.65 (-1.14 to -0.17)	1445.652	1139.92	-0.27 (-0.48 to -0.06)
Azerbaijan	5.398561848	3.243662	-1.56 (-1.81 to -1.3)	355.7609	270.9294	-0.86 (-0.96 to -0.75)
Bahamas	12.52888839	15.14776	0.45 (0.14 to 0.75)	421.2341	450.5501	0.13 (-0.03 to 0.29)
Bahrain	19.21032951	12.21631	-1.92 (-2.34 to -1.49)	578.919	413.0575	-1.73 (-2.07 to -1.39)
Bangladesh	14.12453581	11.58906	-0.51 (-1.04 to 0.03)	397.8378	351.9955	-0.35 (-0.72 to 0.01)
Barbados	11.98730298	14.04298	0.79 (0.62 to 0.96)	346.6557	407.6153	0.69 (0.57 to 0.8)
Belarus	9.239321979	9.221857	-0.74 (-1.14 to -0.34)	715.2364	726.8666	-0.23 (-0.56 to 0.11)
Belgium	27.9185701	25.47854	0.1 (-0.13 to 0.32)	1427.757	1655.908	0.69 (0.52 to 0.87)
Belize	9.462413221	12.56136	0.53 (0.03 to 1.04)	351.9147	411.2256	0.31 (0.02 to 0.6)
Benin	44.73602563	39.38104	-0.47 (-0.54 to -0.4)	960.9918	857.0858	-0.45 (-0.5 to -0.39)
Bermuda	9.961091933	6.298354	-2.08 (-2.37 to -1.8)	324.8215	272.3967	-0.85 (-0.95 to -0.76)

Bhutan	66.61003625	63.75277	-0.3 (-0.37 to -0.22)	1417.887	1547.517	0.18 (0.13 to 0.22)
Bolivia (Plurinational State of)	27.0257684	22.55375	-0.54 (-0.6 to -0.49)	750.4941	668.5694	-0.38 (-0.41 to -0.34)
Bosnia and Herzegovina	8.046906337	4.372966	-2.07 (-2.47 to -1.68)	659.394	522.89	-0.71 (-0.8 to -0.62)
Botswana	17.02268159	11.90329	-0.59 (-1 to -0.18)	494.6751	408.7666	-0.21 (-0.49 to 0.07)
Brazil	22.71632241	23.69299	0.8 (0.44 to 1.15)	880.2989	794.4926	-0.14 (-0.23 to -0.05)
Brunei Darussalam	28.19686553	15.80771	-1.48 (-1.69 to -1.27)	1217.051	892.477	-0.97 (-1.01 to -0.93)
Bulgaria	12.95631475	8.186153	-1.71 (-1.99 to -1.43)	756.8461	664.6359	-0.4 (-0.45 to -0.35)
Burkina Faso	79.19907054	65.52458	-0.71 (-0.79 to -0.63)	1528.825	1284.159	-0.62 (-0.68 to -0.55)
Burundi	60.40234171	50.53694	-0.96 (-1.09 to -0.82)	1205.664	1001.984	-0.92 (-1.03 to -0.81)
Cabo Verde	18.08046358	16.92604	-0.07 (-0.32 to 0.18)	491.4807	461.8926	-0.1 (-0.26 to 0.06)
Cambodia	56.84206732	66.92845	0.5 (0.4 to 0.6)	1259.902	1487.741	0.52 (0.45 to 0.59)
Cameroon	58.630108	49.21395	-0.65 (-0.73 to -0.57)	1204.36	1027.428	-0.6 (-0.66 to -0.54)
Canada	21.94961225	26.97029	0.84 (0.74 to 0.95)	1024.713	1185.273	0.69 (0.59 to 0.79)
Central African Republic	55.18155723	49.9122	-0.34 (-0.4 to -0.28)	1141.759	1018.782	-0.4 (-0.45 to -0.35)
Chad	43.09973169	47.45808	0.27 (0.16 to 0.38)	914.5194	994.2885	0.23 (0.14 to 0.33)
Chile	21.59542423	17.21036	0.22 (-0.09 to 0.52)	905.3108	888.8999	0.26 (0.14 to 0.38)
China	26.28757923	23.33121	-0.07 (-0.47 to 0.33)	821.6753	778.5683	-0.24 (-0.36 to -0.11)
Colombia	19.09145217	9.210787	-3.17 (-3.67 to -2.67)	753.7199	423.8551	-2.18 (-2.39 to -1.97)
Comoros	52.49138533	51.70298	-0.22 (-0.49 to 0.04)	1066.716	1036.242	-0.26 (-0.53 to 0.01)
Congo	55.87954948	49.05115	-0.58 (-0.66 to -0.5)	1158.337	1007.83	-0.62 (-0.7 to -0.55)
Cook Islands	17.63677785	11.31859	-1.42 (-1.56 to -1.28)	525.6652	422.0816	-0.67 (-0.72 to -0.62)
Costa Rica	33.31174854	19.86504	-1.84 (-2.01 to -1.66)	1010.411	693.9418	-1.32 (-1.39 to -1.25)
Coted'Ivoire	44.72469921	42.52252	-0.01 (-0.14 to 0.11)	917.4426	894.6175	0.05 (-0.03 to 0.14)

Croatia	54.29456633	34.14981	-0.78 (-1.07 to -0.48)	1650.739	1374.849	-0.24 (-0.37 to -0.11)
Cuba	51.53303625	55.53024	-0.25 (-0.49 to -0.02)	1238.73	1384.566	0.04 (-0.1 to 0.19)
Cyprus	72.85410354	29.02283	-3.21 (-3.53 to -2.9)	1925.275	1234.378	-1.52 (-1.62 to -1.41)
Czechia	82.73113921	20.8687	-4.88 (-5.28 to -4.47)	2480.373	1001.607	-3.16 (-3.33 to -3)
Democratic People's Republic of Korea	19.67842461	20.59688	0.4 (0.21 to 0.58)	566.5449	527.356	0.05 (-0.09 to 0.19)
Democratic Republic of the Congo	46.23374588	49.35857	0.29 (0.25 to 0.33)	999.7658	1051.198	0.22 (0.19 to 0.26)
Denmark	48.72304726	20.16192	-3.47 (-3.83 to -3.11)	1767.838	1012.986	-2.17 (-2.31 to -2.02)
Djibouti	45.97277021	48.18407	0.11 (-0.03 to 0.24)	933.6557	958.5795	0.03 (-0.1 to 0.16)
Dominica	11.15269212	10.23035	-0.52 (-0.83 to -0.2)	323.7595	318.9919	-0.19 (-0.42 to 0.05)
Dominican Republic	15.37859309	10.54593	-0.86 (-1.19 to -0.52)	417.2179	378.0862	-0.21 (-0.37 to -0.06)
Ecuador	21.44328032	21.31113	0.47 (0.28 to 0.66)	611.6654	605.0199	0.2 (0.11 to 0.3)
Egypt	21.96523115	15.9857	-0.28 (-0.47 to -0.08)	619.4704	517.9239	-0.33 (-0.41 to -0.24)
El Salvador	21.82414307	16.00794	-0.96 (-1.1 to -0.82)	774.3866	628.4619	-0.72 (-0.77 to -0.68)
Equatorial Guinea	46.88929485	41.31069	-0.55 (-0.65 to -0.44)	1000.169	871.1685	-0.59 (-0.69 to -0.49)
Eritrea	57.37431676	62.44778	0.28 (0.23 to 0.33)	1137.069	1203.352	0.19 (0.15 to 0.23)
Estonia	17.63296248	9.245102	-2.77 (-3.07 to -2.47)	1045.854	568.7701	-2.36 (-2.49 to -2.22)
Eswatini	20.17856112	17.74379	-0.04 (-0.43 to 0.36)	552.2508	487.0352	-0.2 (-0.5 to 0.11)
Ethiopia	77.57135811	60.27348	-1.2 (-1.36 to -1.03)	1576.757	1156.451	-1.37 (-1.51 to -1.23)
Fiji	19.41030739	19.38456	-0.08 (-0.25 to 0.09)	492.0991	469.6674	-0.17 (-0.28 to -0.07)
Finland	33.36415099	20.6967	-1.58 (-1.72 to -1.43)	1600.48	1351.085	-0.54 (-0.86 to -0.23)
France	46.48656558	23.78888	-1.85 (-2.05 to -1.66)	1697.524	1340.422	-0.57 (-0.64 to -0.5)
Gabon	51.09745646	43.611	-0.68 (-0.82 to -0.54)	1075.913	894.0128	-0.76 (-0.87 to -0.65)

Gambia	56.14851605	59.86815	0.11 (0.03 to 0.19)	1089.395	1176.128	0.11 (0.02 to 0.2)
Georgia	9.720055375	14.30921	2.53 (1.53 to 3.53)	552.1269	687.5797	1.34 (0.98 to 1.71)
Germany	31.12919467	24.11984	-0.26 (-1.01 to 0.5)	1247.374	1145.813	-0.02 (-0.25 to 0.21)
Ghana	55.50043574	51.77095	-0.25 (-0.29 to -0.2)	1123.222	1027.169	-0.35 (-0.39 to -0.31)
Greece	16.02416298	12.78197	-0.27 (-1.1 to 0.56)	1019.834	704.121	-1.06 (-1.23 to -0.88)
Greenland	68.69590829	44.63063	-1.17 (-1.43 to -0.91)	2568.992	1894.405	-0.93 (-1.04 to -0.82)
Grenada	13.01650099	15.43011	1.11 (0.72 to 1.49)	364.9327	433.9804	0.76 (0.64 to 0.87)
Guam	28.06050782	5.131334	-4.48 (-5.49 to -3.46)	628.5537	337.8425	-1.89 (-2.62 to -1.16)
Guatemala	27.95275162	13.8544	-2.31 (-2.62 to -2)	804.243	617.1597	-0.99 (-1.13 to -0.85)
Guinea	45.12516742	45.29093	0 (-0.08 to 0.08)	976.4676	958.6731	-0.1 (-0.17 to -0.04)
Guinea-Bissau	50.87238479	50.89995	0 (-0.12 to 0.12)	1099.807	1066.387	-0.13 (-0.25 to -0.01)
Guyana	25.45215955	26.56286	0.02 (-0.24 to 0.28)	638.4525	673.0073	0.03 (-0.12 to 0.18)
Haiti	25.36906088	22.80689	-0.49 (-0.71 to -0.27)	626.4726	568.6954	-0.49 (-0.68 to -0.29)
Honduras	14.29356956	20.39678	1.29 (0.94 to 1.64)	580.8727	666.4209	0.56 (0.37 to 0.74)
Hungary	96.36170151	20.42819	-5.47 (-5.82 to -5.13)	2697.885	1039.953	-3.53 (-3.71 to -3.34)
Iceland	22.05405995	22.02329	0.2 (-0.11 to 0.52)	1107.901	982.924	-0.39 (-0.44 to -0.33)
India	85.52757277	80.30924	-0.16 (-0.41 to 0.08)	2225.488	2100.672	-0.24 (-0.33 to -0.14)
Indonesia	42.79602047	37.92219	-0.8 (-1.06 to -0.54)	1199.075	939.5473	-1.18 (-1.38 to -0.98)
Iran (Islamic Republic of)	21.97919914	15.10881	-1.22 (-1.31 to -1.12)	789.4331	530.404	-1.37 (-1.46 to -1.29)
Iraq	11.68014541	10.55555	-0.7 (-0.83 to -0.57)	573.6223	455.2674	-0.97 (-1.17 to -0.78)
Ireland	26.07821226	11.35624	-2.37 (-2.63 to -2.12)	1126.775	878.0573	-0.73 (-0.82 to -0.64)
Israel	21.51615497	10.72857	-2.4 (-2.68 to -2.11)	912.822	681.1394	-0.93 (-1.06 to -0.81)
Italy	36.64898216	18.14208	-2.32 (-2.54 to -2.09)	1515.019	964.9435	-1.54 (-1.6 to -1.49)
Jamaica	6.516914072	9.604676	0.97 (0.58 to 1.35)	279.8821	347.5021	0.61 (0.46 to 0.77)

Japan	10.1091505	6.519885	-1.95 (-2.14 to -1.76)	720.3849	529.1842	-1.21 (-1.34 to -1.08)
Jordan	19.92488881	11.63348	-2 (-2.57 to -1.42)	619.7639	409.2458	-1.58 (-1.9 to -1.27)
Kazakhstan	10.0439704	6.88136	-0.88 (-1.27 to -0.49)	546.0856	470.0898	-0.25 (-0.43 to -0.07)
Kenya	54.74287782	58.01712	0.52 (0.37 to 0.68)	1089.441	1101.179	0.28 (0.17 to 0.4)
Kiribati	10.37974952	10.95721	0.8 (0.04 to 1.56)	332.0605	322.0156	0.42 (-0.2 to 1.05)
Kuwait	15.3727717	7.888437	-2.17 (-2.98 to -1.36)	581.4345	360.3621	-1.66 (-2.09 to -1.24)
Kyrgyzstan	8.982126932	5.519058	-0.93 (-1.29 to -0.58)	504.3949	341.6811	-1.04 (-1.17 to -0.91)
Lao People's Democratic Republic	28.20981327	28.31372	-0.02 (-0.09 to 0.04)	730.9589	716.3698	-0.1 (-0.15 to -0.04)
Latvia	26.33061094	13.12172	-2.83 (-3.31 to -2.36)	1326.951	687.7167	-2.72 (-2.98 to -2.46)
Lebanon	33.95764962	16.84711	-2.33 (-2.42 to -2.23)	787.8157	470.5174	-1.72 (-1.82 to -1.62)
Lesotho	17.28553019	21.84344	1.58 (1.09 to 2.07)	487.5425	596.9497	1.26 (0.9 to 1.62)
Liberia	45.08485393	43.68062	-0.21 (-0.29 to -0.12)	927.6509	917.6672	-0.16 (-0.23 to -0.08)
Libya	19.80693942	23.28815	1.11 (0.91 to 1.31)	703.7256	764.8134	0.66 (0.53 to 0.79)
Lithuania	16.13151032	14.0005	-0.54 (-0.83 to -0.24)	1023.972	814.9351	-0.91 (-0.99 to -0.82)
Luxembourg	29.29779691	22.05292	-0.48 (-0.71 to -0.25)	1376.765	1191.603	-0.19 (-0.29 to -0.1)
Madagascar	44.08059419	38.54619	-0.54 (-0.6 to -0.47)	907.036	798.8226	-0.53 (-0.58 to -0.48)
Malawi	57.05330317	57.15339	-0.1 (-0.22 to 0.01)	1094.861	1075.883	-0.17 (-0.25 to -0.08)
Malaysia	20.7216985	21.07202	0.21 (0.01 to 0.41)	657.7535	621.8946	-0.14 (-0.24 to -0.03)
Maldives	20.7352396	12.55408	-1.83 (-2 to -1.67)	667.5175	499.7299	-1.1 (-1.21 to -0.99)
Mali	60.31332753	53.72972	-0.41 (-0.47 to -0.35)	1276.456	1167.623	-0.35 (-0.4 to -0.31)
Malta	26.67820713	17.34061	-1.48 (-1.73 to -1.22)	1271.004	978.9776	-0.75 (-0.86 to -0.64)
Marshall Islands	33.99374537	32.31468	-0.2 (-0.34 to -0.07)	748.0258	745.1409	-0.06 (-0.19 to 0.07)
Mauritania	54.600512	44.71817	-0.79 (-0.86 to -0.72)	1218.464	998.1875	-0.78 (-0.84 to -0.73)

Mauritius	5.352024642	6.841682	0.17 (-0.54 to 0.88)	251.044	279.9789	0.19 (-0.08 to 0.45)
Mexico	42.22340162	15.73262	-2.85 (-3.12 to -2.58)	1290.658	668.3716	-1.67 (-1.89 to -1.45)
Micronesia (Federated States of)	38.69459299	35.90169	-0.2 (-0.23 to -0.16)	842.454	811.6385	-0.08 (-0.12 to -0.04)
Monaco	10.4060703	9.254356	-0.29 (-0.32 to -0.26)	727.3044	716.5837	0.01 (-0.1 to 0.11)
Mongolia	10.94052098	9.029842	-0.55 (-0.67 to -0.43)	556.7926	536.9763	-0.01 (-0.07 to 0.04)
Montenegro	12.14641417	14.27669	0.48 (0.06 to 0.91)	786.9387	697.7783	-0.38 (-0.44 to -0.32)
Morocco	12.62390698	12.3188	0.05 (-0.01 to 0.11)	597.6009	605.8545	0.02 (-0.05 to 0.08)
Mozambique	53.3322537	56.5642	0.53 (0.41 to 0.66)	1067.633	1096.792	0.31 (0.22 to 0.4)
Myanmar	40.19579473	33.02529	-0.93 (-1.06 to -0.81)	967.7073	854.9983	-0.62 (-0.71 to -0.53)
Namibia	18.83306451	16.49892	-0.61 (-0.83 to -0.4)	524.1771	456.6509	-0.6 (-0.73 to -0.48)
Nauru	33.50322034	31.52704	-0.08 (-0.22 to 0.06)	779.5275	791.6378	0.1 (-0.04 to 0.24)
Nepal	51.24449098	54.2531	0.21 (0 to 0.41)	1348.487	1441.073	0.17 (0.07 to 0.27)
Netherlands	27.05285209	43.32552	1.91 (1.52 to 2.29)	1027.1	1483.848	1.73 (1.17 to 2.29)
New Zealand	23.47160771	23.38106	0.83 (0.52 to 1.14)	1426.771	1262.411	-0.02 (-0.15 to 0.11)
Nicaragua	16.26375541	13.24898	-0.21 (-0.43 to 0)	617.3534	594.3087	-0.06 (-0.18 to 0.05)
Niger	43.85558781	43.1671	-0.14 (-0.2 to -0.08)	981.4307	986.4133	-0.06 (-0.11 to -0.02)
Nigeria	43.88027634	45.8202	0.18 (0.1 to 0.26)	944.2113	962.437	0.1 (0.04 to 0.16)
Niue	26.20833597	24.24652	-0.31 (-0.35 to -0.28)	622.1798	601.2541	-0.16 (-0.23 to -0.08)
North Macedonia	13.57607418	16.49895	0.16 (-0.29 to 0.61)	652.5862	734.1925	0.35 (0.11 to 0.6)
Northern Mariana Islands	32.0040497	29.80574	-0.31 (-0.65 to 0.03)	831.5298	821.7246	0.02 (-0.09 to 0.13)
Norway	37.5615348	32.43494	-0.19 (-0.44 to 0.06)	1542.496	1326.219	-0.32 (-0.39 to -0.24)
Oman	33.85905477	19.23997	-1.6 (-1.77 to -1.43)	1202.461	774.0225	-1.44 (-1.58 to -1.3)
Pakistan	17.59367162	19.93952	0.16 (-0.05 to 0.37)	506.5924	509.0666	-0.14 (-0.35 to 0.07)

Palau	76.16947153	86.06255	0.74 (0.58 to 0.91)	1504.836	1557.715	0.33 (0.22 to 0.44)
Palestine	19.13051591	13.37144	-1.09 (-1.34 to -0.83)	587.4277	478.5403	-0.64 (-0.75 to -0.52)
Panama	13.14652823	6.690604	-2.53 (-2.81 to -2.24)	580.9704	360.7467	-1.73 (-1.81 to -1.64)
Papua New Guinea	27.17986759	28.96976	0.33 (0.26 to 0.4)	994.7381	1244.85	0.74 (0.7 to 0.77)
Paraguay	14.22057929	16.61913	1.02 (0.8 to 1.23)	559.3588	566.14	0.3 (0.19 to 0.4)
Peru	13.26554983	12.94894	-0.35 (-0.6 to -0.1)	452.6682	447.9567	-0.17 (-0.27 to -0.07)
Philippines	21.65659231	18.90108	0.24 (0.05 to 0.44)	599.1596	538.1241	-0.09 (-0.19 to 0.01)
Poland	35.11670629	16.45609	-3.17 (-3.45 to -2.9)	1343.404	794.1806	-2.02 (-2.13 to -1.91)
Portugal	21.17231085	13.33979	-1.22 (-1.79 to -0.65)	969.445	690.312	-0.93 (-1.16 to -0.7)
Puerto Rico	14.60465661	8.297169	-1.98 (-2.3 to -1.67)	474.4129	414.7298	-0.45 (-0.54 to -0.36)
Qatar	33.04922636	13.39175	-3.18 (-3.85 to -2.51)	818.6233	495.2838	-1.72 (-2.12 to -1.32)
Republic of Korea	29.02784658	15.33319	-2.28 (-2.62 to -1.95)	1407.042	968.5694	-1.44 (-1.55 to -1.33)
Republic of Moldova	14.697645	6.440324	-2.59 (-2.78 to -2.4)	937.5997	504.8362	-1.99 (-2.05 to -1.93)
Romania	15.02360382	7.923496	-2.4 (-2.68 to -2.12)	950.205	666.2201	-1.31 (-1.4 to -1.22)
Russian Federation	12.80417369	10.72954	-0.95 (-1.2 to -0.7)	802.241	695.1921	-0.7 (-1.02 to -0.38)
Rwanda	72.95066439	55.70774	-1.45 (-1.67 to -1.24)	1418.722	1073.732	-1.41 (-1.59 to -1.23)
Saint Kitts and Nevis	14.1179928	12.88741	0.1 (-0.29 to 0.48)	397.3629	390.9925	0.11 (-0.09 to 0.32)
Saint Lucia	13.14045856	9.832945	-2.24 (-2.61 to -1.86)	377.263	330.1107	-0.94 (-1.06 to -0.82)
Saint Vincent and the Grenadines	8.518651509	8.121823	-0.34 (-0.63 to -0.06)	283.9374	294.4252	0.05 (-0.07 to 0.17)
Samoa	27.34810117	28.34296	0.18 (0.15 to 0.22)	648.2402	715.2897	0.38 (0.34 to 0.43)
San Marino	15.89437269	7.33439	-2.02 (-2.36 to -1.68)	822.6375	752.2552	-0.12 (-0.22 to -0.03)
Sao Tome and Principe	26.68672272	28.2312	0.19 (-0.01 to 0.38)	642.4631	706.0817	0.24 (0.07 to 0.4)
Saudi Arabia	27.6585984	18.68699	-1.2 (-1.28 to -1.12)	1360.158	1110.824	-0.75 (-0.81 to -0.69)

Senegal	43.82730635	44.62875	-0.09 (-0.19 to 0.02)	941.5801	962.9053	-0.02 (-0.12 to 0.07)
Serbia	17.79569077	9.502986	-2.76 (-3.08 to -2.45)	812.3939	648.0266	-0.88 (-0.95 to -0.81)
Seychelles	8.520647817	6.414147	-0.68 (-0.82 to -0.54)	331.121	276.6679	-0.48 (-0.54 to -0.41)
Sierra Leone	43.8006372	44.26129	-0.01 (-0.17 to 0.15)	900.484	935.8878	0.08 (-0.05 to 0.21)
Singapore	9.784300403	4.847532	-2.67 (-2.97 to -2.36)	649.1144	550.2358	-0.7 (-0.88 to -0.51)
Slovakia	32.07718903	16.6098	-1.98 (-2.55 to -1.4)	1421.654	941.6487	-1.2 (-1.5 to -0.9)
Slovenia	44.21581455	33.14192	-1.28 (-1.64 to -0.91)	1885.087	1401.351	-0.79 (-0.92 to -0.65)
Solomon Islands	29.49530833	30.88673	0.13 (0.05 to 0.22)	1233.447	1413.616	0.4 (0.34 to 0.46)
Somalia	55.09991491	56.28664	0.17 (0.06 to 0.28)	1107.226	1134.4	0.12 (0.02 to 0.22)
South Africa	13.56192592	12.42802	-0.59 (-0.96 to -0.22)	508.8325	382.325	-1.13 (-1.35 to -0.92)
South Sudan	45.75798065	48.91771	0.09 (-0.02 to 0.2)	930.0653	974.554	0.03 (-0.06 to 0.12)
Spain	11.1203972	9.587764	-0.1 (-0.29 to 0.09)	714.302	825.9286	0.72 (0.59 to 0.85)
Sri Lanka	32.246802	17.41091	-2.05 (-2.19 to -1.91)	784.0962	676.6949	-0.59 (-0.68 to -0.5)
Sudan	29.71129894	21.57306	-1.11 (-1.15 to -1.08)	842.5344	660.801	-0.85 (-0.88 to -0.82)
Suriname	19.43343433	14.83864	-0.63 (-0.76 to -0.5)	504.9692	448.0972	-0.29 (-0.39 to -0.19)
Sweden	23.4098246	20.56043	-0.06 (-0.28 to 0.16)	1183.642	1060.022	-0.26 (-0.4 to -0.12)
Switzerland	46.83302065	24.97227	-0.95 (-1.55 to -0.33)	1934.059	1407.67	-0.86 (-0.98 to -0.73)
Syrian Arab Republic	14.93019211	14.61672	-0.29 (-0.48 to -0.1)	541.3786	533.4878	-0.24 (-0.4 to -0.09)
Taiwan (Province of China)	21.38706455	13.94931	-1.16 (-1.37 to -0.95)	789.6108	439.3406	-1.97 (-2.12 to -1.83)
Tajikistan	5.491103136	3.286236	-1.98 (-2.24 to -1.72)	403.9459	286.1681	-1.33 (-1.4 to -1.27)
Thailand	29.67209883	14.56911	-3.19 (-3.59 to -2.79)	813.0348	524.922	-1.91 (-2.14 to -1.68)
Timor-Leste	23.21045956	27.8297	0.76 (0.68 to 0.84)	622.943	711.6254	0.59 (0.52 to 0.65)
Togo	41.86377622	41.60563	-0.05 (-0.1 to -0.01)	923.9705	890.1841	-0.16 (-0.19 to -0.13)
Tokelau	30.34871575	24.8135	-0.63 (-0.69 to -0.56)	708.4705	646.1831	-0.27 (-0.34 to -0.2)

Tonga	24.21340247	21.23503	-0.06 (-0.59 to 0.47)	605.9972	541.2753	-0.17 (-0.64 to 0.3)
Trinidad and Tobago	18.67947701	10.50958	-1.92 (-2.06 to -1.79)	465.7015	326.9603	-1.26 (-1.32 to -1.19)
Tunisia	17.35712262	13.57788	-0.74 (-0.82 to -0.66)	614.6438	508.0577	-0.6 (-0.67 to -0.52)
Turkey	27.5753637	21.61604	-0.16 (-0.62 to 0.3)	669.71	642.6996	0.25 (0.07 to 0.43)
Turkmenistan	5.473230572	3.552283	-1.02 (-1.46 to -0.57)	367.0067	269.9701	-0.83 (-0.97 to -0.68)
Tuvalu	33.4658186	31.03936	-0.16 (-0.19 to -0.13)	753.0809	725.2528	-0.04 (-0.09 to 0)
Uganda	42.37525484	44.94832	-0.07 (-0.27 to 0.12)	832.5564	882.9371	-0.04 (-0.2 to 0.12)
Ukraine	8.944088497	5.492419	-2.28 (-2.67 to -1.89)	809.3428	542.2595	-1.81 (-2.07 to -1.56)
United Arab Emirates	42.44271567	78.58887	4.18 (3.42 to 4.95)	1260.837	1510.429	1.71 (1.31 to 2.11)
United Kingdom	15.29758675	18.48314	0.86 (0.66 to 1.06)	881.4145	976.0413	0.51 (0.39 to 0.63)
United Republic of Tanzania	51.84527441	47.7194	-0.31 (-0.34 to -0.27)	1031.587	967.4245	-0.22 (-0.24 to -0.19)
United States of America	12.95033316	23.03131	2.16 (2.03 to 2.29)	881.5347	1193.635	1.09 (1.03 to 1.15)
United States Virgin Islands	17.64490684	7.633557	-2.61 (-2.85 to -2.37)	464.9863	317.1546	-1.23 (-1.33 to -1.13)
Uruguay	18.64538444	18.29157	0.19 (-0.09 to 0.46)	936.7349	869.8083	-0.2 (-0.27 to -0.12)
Uzbekistan	5.934544698	3.849503	-0.7 (-0.99 to -0.42)	388.3796	295.643	-0.67 (-0.78 to -0.55)
Vanuatu	26.74352623	27.58081	0.11 (0.06 to 0.16)	615.6944	628.3446	0.06 (0 to 0.12)
Venezuela (Bolivarian Republic of)	23.25988931	14.80603	-1.66 (-1.91 to -1.41)	831.541	603.6417	-1.18 (-1.28 to -1.08)
Viet Nam	57.98990939	59.72568	0.19 (0.16 to 0.23)	1287.074	1342.307	0.25 (0.18 to 0.31)
Yemen	26.10065065	22.83082	-0.65 (-0.72 to -0.57)	809.1208	713.3657	-0.54 (-0.6 to -0.49)
Zambia	62.60516437	55.727	-0.5 (-0.6 to -0.4)	1237.423	1104.821	-0.52 (-0.6 to -0.44)
Zimbabwe	24.85734821	26.97896	1.05 (0.6 to 1.5)	620.0206	644.5176	0.73 (0.41 to 1.04)

Table 2. Age-standardised YLDs rates and YLLs rates in 1990 and 2021, and their EAPC from 1990 to 2021 for LBMD among PWM, by country.

Countries	Age-standardised YLDs rate, 1990	Age-standardised YLDs rate, 2021	EAPC of YLDs rate No. (95% CI)	Age-standardised YLLs rate, 1990	Age-standardised YLLs rate, 2021	EAPC of YLLs rate No. (95% CI)
Afghanistan	250.5813	239.7606	-0.18 (-0.29 to -0.08)	928.5712	806.3163	-0.57 (-0.66 to -0.48)
Albania	571.596	466.6852	-0.78 (-0.92 to -0.64)	135.472	89.80154	-1.03 (-1.23 to -0.84)
Algeria	391.4251	330.7121	-0.58 (-0.62 to -0.54)	371.6253	283.7747	-0.54 (-0.66 to -0.42)
American Samoa	252.4168	267.3062	0.23 (0.15 to 0.31)	289.4723	319.0495	0.69 (0.57 to 0.81)
Andorra	1354.32	1647.13	0.61 (0.57 to 0.65)	479.1906	291.5967	-1.39 (-1.56 to -1.22)
Angola	249.9213	262.0915	0.19 (0.15 to 0.23)	801.5277	761.2293	-0.33 (-0.4 to -0.25)
Antigua and Barbuda	174.2654	220.8059	0.86 (0.73 to 0.99)	101.2374	125.0615	0.37 (0.07 to 0.67)
Argentina	587.6972	513.8815	-0.36 (-0.45 to -0.26)	251.2784	151.7025	-1.09 (-1.29 to -0.89)
Armenia	406.5962	233.2671	-1.67 (-2.13 to -1.21)	197.82	111.4612	-1.28 (-1.67 to -0.88)
Australia	849.862	983.9141	0.67 (0.57 to 0.78)	243.1689	285.2223	1.42 (1.14 to 1.7)
Austria	983.5614	870.5651	-0.06 (-0.19 to 0.08)	462.0904	269.355	-0.86 (-1.3 to -0.42)
Azerbaijan	251.5371	209.39	-0.5 (-0.57 to -0.42)	104.2238	61.53946	-1.81 (-2.06 to -1.57)
Bahamas	219.3547	235.1566	0.17 (0.06 to 0.29)	201.8795	215.3935	0.08 (-0.18 to 0.35)
Bahrain	249.2667	225.2453	-1.02 (-1.29 to -0.75)	329.6522	187.8122	-2.43 (-2.87 to -1.99)
Bangladesh	181.9315	186.1075	0.02 (-0.23 to 0.27)	215.9063	165.8881	-0.7 (-1.18 to -0.22)
Barbados	184.4632	223.5909	0.66 (0.53 to 0.79)	162.1925	184.0244	0.72 (0.56 to 0.89)
Belarus	543.2877	563.8456	0.01 (-0.3 to 0.32)	171.9488	163.0209	-1.01 (-1.5 to -0.51)
Belgium	1055.888	1316.986	0.91 (0.73 to 1.1)	371.8688	338.9222	-0.02 (-0.23 to 0.18)
Belize	201.5046	227.1866	0.37 (0.23 to 0.52)	150.4101	184.0389	0.26 (-0.23 to 0.74)
Benin	260.824	269.3268	0.01 (-0.03 to 0.05)	700.1678	587.759	-0.64 (-0.71 to -0.56)
Bermuda	184.1236	192.7807	0.04 (-0.08 to 0.17)	140.698	79.61604	-2.48 (-2.78 to -2.17)

Bhutan	350.4734	609.516	1.83 (1.6 to 2.06)	1067.414	938.0006	-0.6 (-0.69 to -0.52)
Bolivia (Plurinational State of)	283.3786	299.7992	0.21 (0.15 to 0.27)	467.1155	368.7702	-0.78 (-0.84 to -0.72)
Bosnia and Herzegovina	525.1236	456.1599	-0.41 (-0.56 to -0.25)	134.2704	66.73008	-2.31 (-2.61 to -2.01)
Botswana	204.7941	207.7477	0.15 (0.08 to 0.22)	289.881	201.0189	-0.52 (-1 to -0.04)
Brazil	530.54	462.4023	-0.47 (-0.57 to -0.37)	349.759	332.0902	0.38 (0.05 to 0.71)
Brunei Darussalam	729.4973	647.3994	-0.41 (-0.46 to -0.35)	487.5538	245.0775	-2.04 (-2.21 to -1.87)
Bulgaria	559.5476	538.0053	-0.03 (-0.08 to 0.03)	197.2985	126.6307	-1.72 (-1.97 to -1.47)
Burkina Faso	308.5669	313.7417	0.06 (0 to 0.13)	1220.258	970.417	-0.81 (-0.89 to -0.73)
Burundi	256.5887	247.6543	-0.12 (-0.17 to -0.07)	949.0753	754.3294	-1.15 (-1.3 to -1.01)
Cabo Verde	222.9777	225.415	0.11 (0.05 to 0.16)	268.503	236.4776	-0.28 (-0.57 to 0)
Cambodia	362.4875	518.7438	1.27 (1.21 to 1.33)	897.4147	968.9968	0.18 (0.1 to 0.26)
Cameroon	275.6541	274.9093	-0.09 (-0.16 to -0.03)	928.7056	752.5182	-0.76 (-0.85 to -0.67)
Canada	734.8386	856.0475	0.72 (0.6 to 0.84)	289.874	329.2255	0.6 (0.51 to 0.7)
Central African Republic	237.1085	218.5638	-0.26 (-0.31 to -0.22)	904.6505	800.2186	-0.43 (-0.51 to -0.36)
Chad	236.4154	250.0246	0.18 (0.15 to 0.22)	678.104	744.2639	0.25 (0.12 to 0.38)
Chile	606.4829	673.9866	0.46 (0.39 to 0.54)	298.8279	214.9133	-0.27 (-0.54 to 0)
China	436.8083	460.3822	-0.19 (-0.58 to 0.2)	384.867	318.186	-0.33 (-0.7 to 0.04)
Colombia	443.3748	283.4955	-1.47 (-1.56 to -1.38)	310.3451	140.3597	-3.35 (-3.78 to -2.92)
Comoros	235.9689	245.0937	0.09 (0.03 to 0.15)	830.7475	791.1486	-0.36 (-0.69 to -0.03)
Congo	258.2559	250.9712	-0.13 (-0.17 to -0.09)	900.0809	756.8588	-0.77 (-0.87 to -0.67)
Cook Islands	255.8632	261.6311	0.09 (-0.06 to 0.25)	269.802	160.4505	-1.65 (-1.81 to -1.5)
Costa Rica	546.9685	420.2076	-0.88 (-0.9 to -0.85)	463.4428	273.7342	-1.9 (-2.06 to -1.74)
Coted'Ivoire	247.8025	266.0632	0.22 (0.14 to 0.29)	669.6401	628.5543	-0.01 (-0.14 to 0.12)

Croatia	911.5059	955.465	0.3 (0.2 to 0.41)	739.2333	419.3845	-1.18 (-1.45 to -0.92)
Cuba	559.3672	683.8612	0.56 (0.45 to 0.67)	679.3626	700.7052	-0.4 (-0.64 to -0.16)
Cyprus	1023.991	897.454	-0.39 (-0.5 to -0.29)	901.2834	336.9238	-3.37 (-3.63 to -3.1)
Czechia	1396.103	724.6132	-2.28 (-2.35 to -2.22)	1084.27	276.9942	-4.83 (-5.21 to -4.45)
Democratic People's Republic of Korea	259.2079	207.4988	-0.42 (-0.53 to -0.31)	307.337	319.8572	0.37 (0.18 to 0.56)
Democratic Republic of the Congo	257.9993	272.423	0.19 (0.12 to 0.26)	741.7664	778.7748	0.24 (0.19 to 0.28)
Denmark	1133.982	760.0238	-1.53 (-1.59 to -1.46)	633.8565	252.9617	-3.59 (-3.94 to -3.24)
Djibouti	229.122	242.8052	0.1 (0.07 to 0.12)	704.5338	715.7743	0.01 (-0.16 to 0.18)
Dominica	161.8623	174.2791	0.23 (0.07 to 0.38)	161.8972	144.7128	-0.61 (-0.99 to -0.22)
Dominican Republic	206.5068	224.5475	0.23 (0.1 to 0.36)	210.711	153.5387	-0.76 (-1 to -0.51)
Ecuador	279.828	294.8301	0.18 (0.08 to 0.27)	331.8374	310.1897	0.23 (0.06 to 0.41)
Egypt	320.8941	296.4258	-0.24 (-0.3 to -0.18)	298.5763	221.4981	-0.43 (-0.59 to -0.28)
El Salvador	421.6039	377.8712	-0.38 (-0.44 to -0.33)	352.7827	250.5907	-1.17 (-1.31 to -1.04)
Equatorial Guinea	232.0246	245.6441	0.21 (0.18 to 0.25)	768.1444	625.5245	-0.88 (-1.01 to -0.74)
Eritrea	210.5505	257.5533	0.5 (0.42 to 0.58)	926.518	945.799	0.11 (0.07 to 0.15)
Estonia	738.7074	426.5329	-2.05 (-2.16 to -1.94)	307.1465	142.2372	-3.15 (-3.44 to -2.86)
Eswatini	199.3717	167.8538	-0.58 (-0.65 to -0.52)	352.8791	319.1814	0 (-0.45 to 0.46)
Ethiopia	315.0535	281.1205	-0.43 (-0.47 to -0.38)	1261.703	875.3308	-1.64 (-1.82 to -1.46)
Fiji	216.1209	210.7567	-0.08 (-0.21 to 0.04)	275.9782	258.9107	-0.24 (-0.39 to -0.1)
Finland	1143.238	1083.411	-0.18 (-0.57 to 0.21)	457.2419	267.6732	-1.75 (-1.89 to -1.62)
France	1126.885	1047.071	-0.08 (-0.17 to 0.01)	570.6395	293.3516	-1.88 (-2.07 to -1.7)
Gabon	294.0515	260.1403	-0.48 (-0.53 to -0.43)	781.8612	633.8725	-0.86 (-1.03 to -0.7)

Gambia	253.2019	295.0222	0.4 (0.36 to 0.44)	836.1929	881.1054	0.02 (-0.1 to 0.13)
Georgia	368.0078	448.1533	1.08 (0.89 to 1.27)	184.1191	239.4264	2 (1.14 to 2.88)
Germany	843.7152	842.2808	0.14 (0.05 to 0.23)	403.6589	303.5317	-0.41 (-1.09 to 0.28)
Ghana	284.1694	282.2049	-0.2 (-0.25 to -0.15)	839.0529	744.9643	-0.41 (-0.45 to -0.36)
Greece	790.2669	543.8549	-1.09 (-1.19 to -0.99)	229.5674	160.2661	-1 (-1.72 to -0.28)
Greenland	1564.008	1288.328	-0.65 (-0.71 to -0.6)	1004.984	606.0776	-1.43 (-1.71 to -1.16)
Grenada	181.7461	222.8637	0.71 (0.61 to 0.81)	183.1866	211.1167	0.82 (0.47 to 1.17)
Guam	271.959	247.8667	-0.27 (-0.39 to -0.15)	356.5948	89.97582	-3.92 (-5.09 to -2.73)
Guatemala	407.5851	407.3397	-0.11 (-0.16 to -0.06)	396.6579	209.82	-2.11 (-2.42 to -1.8)
Guinea	257.5927	258.6539	-0.09 (-0.13 to -0.05)	718.8748	700.0193	-0.11 (-0.2 to -0.02)
Guinea-Bissau	273.8637	276.0181	-0.04 (-0.09 to 0.01)	825.9434	790.3687	-0.16 (-0.31 to -0.01)
Guyana	265.4366	303.9718	0.26 (0.16 to 0.36)	373.0159	369.0354	-0.13 (-0.33 to 0.06)
Haiti	224.0181	220.0471	-0.13 (-0.25 to -0.01)	402.4545	348.6483	-0.68 (-0.96 to -0.4)
Honduras	332.8786	315.8765	-0.2 (-0.3 to -0.1)	247.9941	350.5444	1.35 (1.03 to 1.67)
Hungary	1447.983	750.7516	-2.53 (-2.66 to -2.4)	1249.902	289.2019	-5.22 (-5.55 to -4.9)
Iceland	798.5036	713.9996	-0.41 (-0.47 to -0.36)	309.3977	268.9244	-0.31 (-0.61 to 0)
India	869.9332	858.5689	-0.14 (-0.16 to -0.11)	1355.555	1242.103	-0.3 (-0.47 to -0.13)
Indonesia	514.5258	387.3299	-1.28 (-1.4 to -1.15)	684.5492	552.2174	-1.11 (-1.38 to -0.85)
Iran (Islamic Republic of)	408.3031	296.4166	-1.15 (-1.23 to -1.08)	381.13	233.9874	-1.62 (-1.73 to -1.5)
Iraq	350.8401	275.4579	-0.95 (-1.24 to -0.66)	222.7821	179.8095	-1.01 (-1.13 to -0.9)
Ireland	777.5459	732.1143	-0.17 (-0.3 to -0.04)	349.2289	145.943	-2.56 (-2.79 to -2.34)
Israel	630.3615	547.9469	-0.36 (-0.49 to -0.23)	282.4606	133.1925	-2.59 (-2.84 to -2.33)
Italy	1057.076	746.5548	-1.22 (-1.26 to -1.18)	457.9428	218.3886	-2.48 (-2.71 to -2.26)
Jamaica	186.107	208.7352	0.39 (0.28 to 0.5)	93.77506	138.7669	1.01 (0.65 to 1.36)

Japan	567.2204	445.2525	-0.91 (-1.07 to -0.75)	153.1646	83.93163	-2.51 (-2.68 to -2.34)
Jordan	289.6243	242.1735	-0.65 (-0.74 to -0.56)	330.1396	167.0722	-2.57 (-3.13 to -2)
Kazakhstan	353.0382	346.7662	0.22 (0.13 to 0.31)	193.0473	123.3236	-1.24 (-1.66 to -0.82)
Kenya	278.2638	273.7619	-0.11 (-0.13 to -0.08)	811.1768	827.417	0.42 (0.26 to 0.58)
Kiribati	183.1299	174.1611	-0.12 (-0.28 to 0.03)	148.9307	147.8544	0.79 (-0.19 to 1.78)
Kuwait	311.2481	249.8883	-1.04 (-1.28 to -0.79)	270.1863	110.4738	-2.69 (-3.45 to -1.93)
Kyrgyzstan	326.5338	235.1029	-1.02 (-1.09 to -0.95)	177.8611	106.5782	-1.08 (-1.42 to -0.74)
Lao People's Democratic Republic	241.8206	273.385	0.43 (0.39 to 0.46)	489.1383	442.9848	-0.38 (-0.46 to -0.3)
Latvia	892.4059	477.3946	-2.61 (-2.85 to -2.38)	434.5448	210.3221	-2.96 (-3.32 to -2.59)
Lebanon	367.5611	248.43	-1.48 (-1.7 to -1.26)	420.2546	222.0874	-1.95 (-2.05 to -1.85)
Lesotho	188.6281	193.2703	0.21 (0.1 to 0.31)	298.9144	403.6794	1.81 (1.27 to 2.36)
Liberia	243.1246	262.0195	0.14 (0.09 to 0.2)	684.5264	655.6477	-0.27 (-0.36 to -0.17)
Libya	345.6731	370.2493	0.54 (0.37 to 0.7)	358.0525	394.564	0.78 (0.6 to 0.95)
Lithuania	728.6803	602.3138	-0.78 (-0.89 to -0.67)	295.292	212.6213	-1.23 (-1.48 to -0.98)
Luxembourg	980.1488	920.052	0.02 (-0.09 to 0.13)	396.6162	271.5514	-0.78 (-1 to -0.55)
Madagascar	215.8281	208.2108	-0.22 (-0.26 to -0.17)	691.2079	590.6118	-0.63 (-0.69 to -0.56)
Malawi	235.1307	244.2975	0.2 (0.08 to 0.31)	859.7298	831.5858	-0.26 (-0.39 to -0.13)
Malaysia	290.5752	292.2443	0.07 (0.04 to 0.09)	367.1783	329.6503	-0.3 (-0.48 to -0.13)
Maldives	332.0357	325.0971	-0.09 (-0.12 to -0.06)	335.4818	174.6327	-2.42 (-2.64 to -2.19)
Mali	314.4931	340.2959	0.19 (0.15 to 0.22)	961.9634	827.3273	-0.55 (-0.61 to -0.49)
Malta	913.6141	758.341	-0.45 (-0.57 to -0.33)	357.3899	220.6366	-1.71 (-1.96 to -1.46)
Marshall Islands	260.2332	286.5966	0.29 (0.18 to 0.4)	487.7925	458.5444	-0.26 (-0.4 to -0.12)
Mauritania	301.5826	289.5479	-0.26 (-0.31 to -0.21)	916.8814	708.6397	-0.98 (-1.05 to -0.9)

Mauritius	151.2922	165.319	0.56 (0.46 to 0.66)	99.75184	114.6599	-0.24 (-0.86 to 0.37)
Mexico	718.4522	441.9713	-0.99 (-1.27 to -0.72)	572.2056	226.4003	-2.72 (-2.94 to -2.5)
Micronesia (Federated States of)	274.334	308.6436	0.42 (0.37 to 0.47)	568.12	502.9948	-0.35 (-0.39 to -0.3)
Monaco	588.6433	600.1813	0.11 (-0.01 to 0.24)	138.6611	116.4024	-0.48 (-0.51 to -0.45)
Mongolia	340.6929	372.4822	0.44 (0.38 to 0.5)	216.0998	164.4941	-0.8 (-0.93 to -0.67)
Montenegro	608.0722	510.3161	-0.51 (-0.59 to -0.44)	178.8664	187.4621	0.01 (-0.28 to 0.3)
Morocco	390.2198	413.4351	0.1 (0.02 to 0.17)	207.381	192.4195	-0.14 (-0.21 to -0.07)
Mozambique	247.5435	248.9756	-0.08 (-0.13 to -0.04)	820.0892	847.8167	0.43 (0.3 to 0.55)
Myanmar	314.2439	370.0284	0.51 (0.47 to 0.55)	653.4635	484.9699	-1.29 (-1.44 to -1.14)
Namibia	195.6208	180.494	-0.27 (-0.35 to -0.19)	328.5563	276.1569	-0.79 (-1.02 to -0.56)
Nauru	295.2304	335.3056	0.38 (0.27 to 0.49)	484.2971	456.3323	-0.08 (-0.25 to 0.08)
Nepal	610.3508	709.3877	0.37 (0.32 to 0.43)	738.1363	731.6856	0 (-0.21 to 0.2)
Netherlands	687.0394	987.0199	1.83 (1.12 to 2.53)	340.0606	496.8282	1.55 (1.21 to 1.89)
New Zealand	1111.739	987.7476	-0.11 (-0.21 to -0.01)	315.0324	274.6635	0.33 (0.05 to 0.62)
Nicaragua	375.6109	402.7268	0.16 (0.02 to 0.3)	241.7425	191.582	-0.44 (-0.62 to -0.27)
Niger	305.7759	338.2794	0.33 (0.27 to 0.38)	675.6548	648.1339	-0.25 (-0.32 to -0.18)
Nigeria	278.9032	300.3435	0.34 (0.28 to 0.4)	665.3081	662.0934	0 (-0.07 to 0.07)
Niue	264.9943	278.9461	0.15 (0.01 to 0.29)	357.1856	322.3081	-0.4 (-0.44 to -0.36)
North Macedonia	443.691	524.5048	0.72 (0.49 to 0.96)	208.8952	209.6877	-0.41 (-0.76 to -0.06)
Northern Mariana Islands	364.311	420.5005	0.56 (0.48 to 0.65)	467.2188	401.2241	-0.52 (-0.78 to -0.26)
Norway	1042.509	949.6179	-0.23 (-0.33 to -0.14)	499.9871	376.6011	-0.52 (-0.77 to -0.27)
Oman	542.9994	448.6399	-0.74 (-0.88 to -0.6)	659.4618	325.3826	-2.15 (-2.33 to -1.97)
Pakistan	219.863	184.9625	-0.56 (-0.78 to -0.33)	286.7294	324.1041	0.13 (-0.1 to 0.35)

Palau	476.5696	504.2754	0.2 (0.17 to 0.22)	1028.266	1053.439	0.39 (0.23 to 0.54)
Palestine	306.3019	289.9137	-0.15 (-0.2 to -0.09)	281.1258	188.6266	-1.24 (-1.49 to -0.99)
Panama	378.6135	255.3502	-1.4 (-1.45 to -1.34)	202.3569	105.3964	-2.39 (-2.61 to -2.16)
Papua New Guinea	570.632	803.1649	1.02 (0.97 to 1.08)	424.1061	441.6856	0.28 (0.19 to 0.37)
Paraguay	353.6514	326.1153	-0.12 (-0.2 to -0.03)	205.7074	240.0246	0.91 (0.73 to 1.09)
Peru	232.034	235.3225	0.06 (-0.03 to 0.15)	220.6342	212.6343	-0.42 (-0.66 to -0.18)
Philippines	305.0087	260.6827	-0.47 (-0.55 to -0.4)	294.1509	277.4414	0.31 (0.17 to 0.46)
Poland	849.6689	572.1078	-1.44 (-1.53 to -1.34)	493.7349	222.0728	-3.24 (-3.49 to -2.99)
Portugal	662.6939	517.2373	-0.66 (-0.82 to -0.5)	306.7512	173.0746	-1.65 (-2.15 to -1.14)
Puerto Rico	275.6828	296.4343	0.32 (0.24 to 0.41)	198.7301	118.2955	-1.88 (-2.15 to -1.61)
Qatar	279.1085	282.1751	0.01 (-0.08 to 0.1)	539.5148	213.1087	-3.09 (-3.75 to -2.43)
Republic of Korea	913.8409	767.3878	-0.74 (-0.81 to -0.68)	493.2008	201.1816	-3.22 (-3.49 to -2.95)
Republic of Moldova	659.6043	381.5129	-1.76 (-1.84 to -1.68)	277.9955	123.3234	-2.58 (-2.83 to -2.32)
Romania	694.5167	527.8602	-1 (-1.06 to -0.95)	255.6883	138.3599	-2.34 (-2.6 to -2.08)
Russian Federation	582.7896	514.8355	-0.51 (-0.86 to -0.16)	219.4515	180.3566	-1.23 (-1.58 to -0.87)
Rwanda	255.0539	260.4282	0.08 (0.02 to 0.14)	1163.668	813.3036	-1.79 (-2.02 to -1.56)
Saint Kitts and Nevis	193.2477	220.5281	0.41 (0.29 to 0.52)	204.1152	170.4644	-0.21 (-0.58 to 0.16)
Saint Lucia	187.4428	196.4966	0.16 (0.05 to 0.26)	189.8203	133.6141	-2.35 (-2.7 to -1.99)
Saint Vincent and the Grenadines	160.4972	184.5138	0.49 (0.37 to 0.6)	123.4402	109.9114	-0.59 (-0.86 to -0.33)
Samoa	269.9978	322.0365	0.61 (0.52 to 0.71)	378.2424	393.2532	0.21 (0.17 to 0.25)
San Marino	606.7349	655.0576	0.35 (0.2 to 0.5)	215.9027	97.19762	-2.02 (-2.3 to -1.73)
Sao Tome and Principe	233.9642	285.4955	0.6 (0.58 to 0.62)	408.4989	420.5863	0.02 (-0.22 to 0.27)
Saudi Arabia	847.7108	787.8148	-0.41 (-0.47 to -0.34)	512.447	323.009	-1.43 (-1.53 to -1.34)

Senegal	261.4279	293.0039	0.35 (0.3 to 0.39)	680.1521	669.9014	-0.17 (-0.3 to -0.04)
Serbia	563.0074	507.7667	-0.28 (-0.36 to -0.19)	249.3866	140.2599	-2.5 (-2.75 to -2.25)
Seychelles	192.3637	172.4032	-0.29 (-0.35 to -0.23)	138.7573	104.2647	-0.75 (-0.92 to -0.57)
Sierra Leone	242.4369	258.4272	0.11 (0.08 to 0.15)	658.0471	677.4606	0.07 (-0.11 to 0.25)
Singapore	486.9942	481.7286	-0.14 (-0.33 to 0.05)	162.1202	68.50718	-3.15 (-3.44 to -2.86)
Slovakia	959.7407	708.3978	-0.81 (-1.03 to -0.58)	461.9128	233.2509	-2.16 (-2.63 to -1.68)
Slovenia	1254.937	1003.263	-0.29 (-0.48 to -0.1)	630.15	398.0882	-1.85 (-2.19 to -1.52)
Solomon Islands	795.7634	974.4674	0.62 (0.58 to 0.67)	437.6832	439.1485	-0.03 (-0.16 to 0.1)
Somalia	212.0617	215.1423	0.06 (0.02 to 0.1)	895.1647	919.2577	0.13 (0.02 to 0.25)
South Africa	275.4859	160.8974	-1.94 (-2.02 to -1.87)	233.3466	221.4276	-0.43 (-0.81 to -0.04)
South Sudan	213.4411	207.7108	-0.11 (-0.15 to -0.06)	716.6242	766.8431	0.07 (-0.06 to 0.2)
Spain	536.3375	698.0748	1.09 (0.9 to 1.27)	177.9646	127.8538	-0.78 (-0.93 to -0.64)
Sri Lanka	317.7376	419.828	0.77 (0.6 to 0.94)	466.3586	256.8669	-2.03 (-2.17 to -1.89)
Sudan	308.7416	289.2146	-0.25 (-0.31 to -0.19)	533.7927	371.5864	-1.25 (-1.28 to -1.21)
Suriname	212.7646	236.8295	0.32 (0.24 to 0.4)	292.2046	211.2676	-0.82 (-0.97 to -0.67)
Sweden	875.2893	814.7976	-0.17 (-0.32 to -0.01)	308.3532	245.224	-0.51 (-0.81 to -0.21)
Switzerland	1336.028	1108.827	-0.71 (-0.77 to -0.65)	598.0308	298.8422	-1.22 (-1.78 to -0.66)
Syrian Arab Republic	319.1672	328.2728	-0.04 (-0.25 to 0.16)	222.2114	205.2149	-0.54 (-0.67 to -0.4)
Taiwan (Province of China)	405.2045	226.8096	-2.16 (-2.3 to -2.02)	384.4063	212.531	-1.77 (-1.95 to -1.59)
Tajikistan	299.3076	224.6325	-1.09 (-1.15 to -1.03)	104.6383	61.53561	-2.06 (-2.29 to -1.83)
Thailand	328.9808	283.5441	-0.63 (-0.76 to -0.5)	484.0539	241.3779	-3.04 (-3.39 to -2.68)
Timor-Leste	231.4985	271.1147	0.66 (0.6 to 0.72)	391.4445	440.5106	0.54 (0.46 to 0.62)
Togo	279.2212	269.1315	-0.22 (-0.3 to -0.14)	644.7493	621.0525	-0.13 (-0.19 to -0.08)
Tokelau	278.8443	308.69	0.37 (0.29 to 0.46)	429.6262	337.4931	-0.76 (-0.82 to -0.69)

Tonga	270.532	262.822	-0.13 (-0.22 to -0.04)	335.4652	278.4532	-0.23 (-0.94 to 0.48)
Trinidad and Tobago	210.0472	173.7942	-0.6 (-0.68 to -0.53)	255.6543	153.1661	-1.9 (-2.03 to -1.76)
Tunisia	324.9854	293.4208	-0.33 (-0.42 to -0.25)	289.6584	214.6369	-0.92 (-1 to -0.83)
Turkey	299.7881	363.6985	0.9 (0.75 to 1.04)	369.922	279.0012	-0.44 (-0.79 to -0.08)
Turkmenistan	257.7803	199.7535	-0.73 (-0.81 to -0.64)	109.2264	70.21657	-1.06 (-1.51 to -0.62)
Tuvalu	264.9074	293.6143	0.41 (0.31 to 0.51)	488.1735	431.6385	-0.32 (-0.35 to -0.28)
Uganda	213.6709	247.2479	0.55 (0.49 to 0.6)	618.8855	635.6892	-0.23 (-0.45 to -0.01)
Ukraine	644.3085	440.5097	-1.67 (-1.89 to -1.45)	165.0343	101.7499	-2.37 (-2.82 to -1.92)
United Arab Emirates	453.1828	348.4965	-1 (-1.22 to -0.78)	807.6539	1161.933	2.88 (2.28 to 3.49)
United Kingdom	670.4834	741.8845	0.49 (0.35 to 0.64)	210.9311	234.1568	0.55 (0.37 to 0.74)
United Republic of Tanzania	247.7507	272.5423	0.39 (0.3 to 0.48)	783.8366	694.8822	-0.43 (-0.46 to -0.39)
United States of America	683.666	876.6337	0.87 (0.77 to 0.97)	197.8687	317.0018	1.77 (1.67 to 1.87)
United States Virgin Islands	211.5809	213.0399	0.06 (-0.05 to 0.18)	253.4054	104.1147	-2.83 (-3.04 to -2.61)
Uruguay	669.9589	624.6588	-0.24 (-0.27 to -0.21)	266.7759	245.1495	-0.08 (-0.32 to 0.16)
Uzbekistan	270.8967	221.0002	-0.62 (-0.73 to -0.5)	117.4828	74.64282	-0.79 (-1.07 to -0.5)
Vanuatu	237.5737	245.6776	0.1 (0 to 0.2)	378.1207	382.667	0.03 (-0.01 to 0.07)
Venezuela (Bolivarian Republic of)	480.9623	376.3532	-0.85 (-0.89 to -0.81)	350.5787	227.2885	-1.72 (-1.97 to -1.46)
Viet Nam	426.7777	520.905	0.72 (0.54 to 0.9)	860.2965	821.4017	-0.01 (-0.06 to 0.04)
Yemen	319.2269	305.3584	-0.14 (-0.23 to -0.04)	489.8939	408.0073	-0.83 (-0.91 to -0.75)
Zambia	265.2464	274.5032	0.14 (0.07 to 0.22)	972.1763	830.3177	-0.7 (-0.81 to -0.6)
Zimbabwe	228.0494	206.8006	-0.13 (-0.3 to 0.04)	391.9712	437.717	1.17 (0.67 to 1.67)

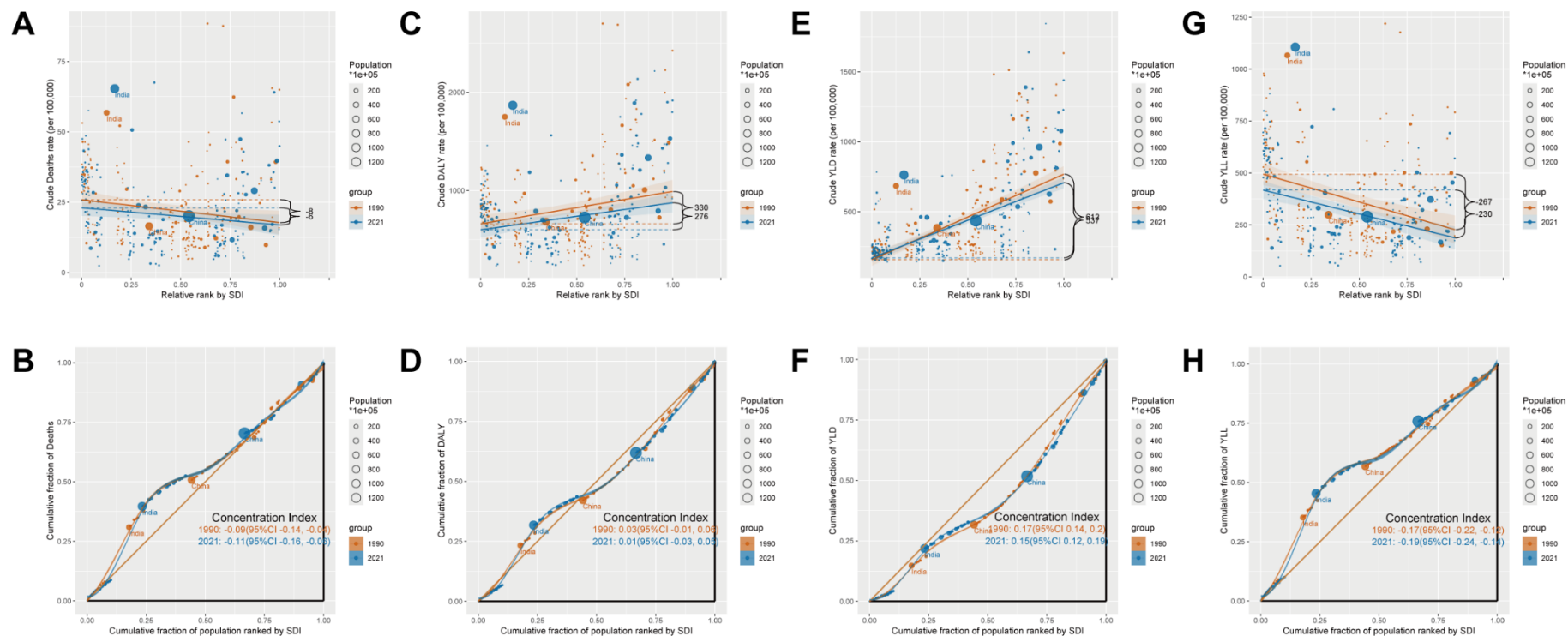


Figure S1. Socioeconomic inequalities in LBMD burden among PMW in 1990 and 2021.

A-D: Crude rates of deaths (A), DALYs (B), YLDs (C), and YLLs (D) across countries ranked by SDI. Lines show the relationship between SDI and LBMD burden in 1990 and 2021, highlighting absolute inequalities. E-H: Concentration curves for deaths (E), DALYs (F), YLDs (G), and YLLs (H), showing how LBMD burden is distributed across countries by SDI. Curves below the diagonal indicate higher burden in lower-SDI countries. The concentration index values summarize the level of inequality.

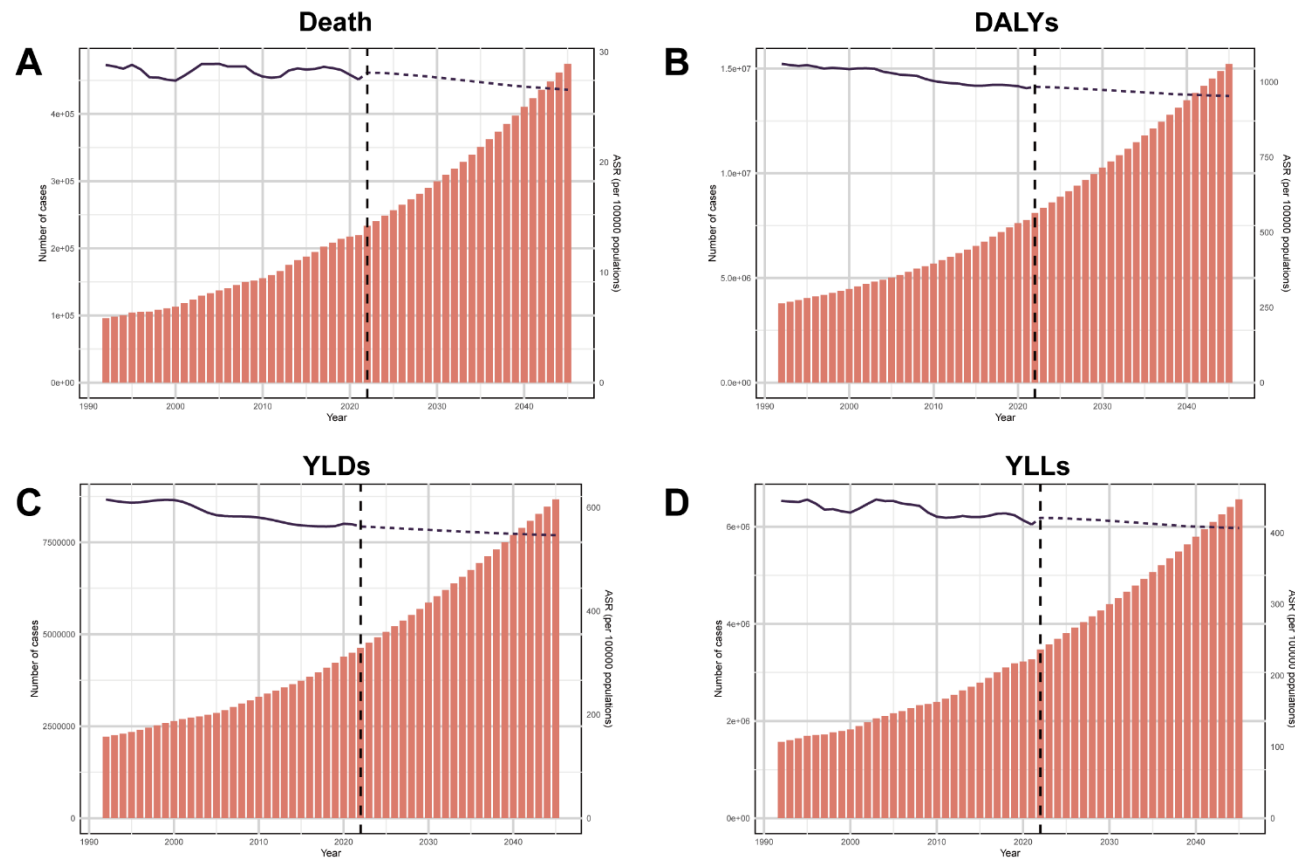


Figure S2: Projected LBMD burden among PMW from 1990 to 2045.

A-D: Historical (1990-2021) and projected (2022-2045) trends in the number of cases (bars, left axis) and ASR (lines, right axis) for deaths (A), DALYs (B), YLDs (C), and YLLs (D) due to LBMD among PMW. The vertical dashed line indicates the separation between observed and forecasted data. Projections suggest a continued rise in absolute burden despite a relatively stable or slightly declining ASR.