

Supplementary Material

Mortality Rates and Mortality Risk Factors in Older Adults with Dementia from Low- and Middle-Income Countries (LMIC): The 10/66 Dementia Research Group Population-Based Cohort Study

Supplementary Table 1. Age- and gender-stratified mortality rates for people with dementia per 1,000 person-years (95%CI) by country

Country	Age group /Gender														
	65-69			70-74			75-79			80-84			≥85		
	F	M	T	F	M	T	F	M	T	F	M	T	F	M	T
Cuba	61.4 (15.3-245.3)	0 ---	41.7 (10.4-166.7)	178.7 (101.5-314.7)	159.5 (71.6-355.0)	171.8 (108.3-272.7)	154.9 (98.8-242.8)	180.9 (90.5-361.7)	161.8 (111.0-235.9)	169.5 (115.4-248.9)	251.4 (154.0-410.3)	193.5 (143.0-261.8)	231.2 (175.7-304.2)	308.4 (196.7-483.5)	248.0 (196.2-313.5)
Dom. Rep.	0 ---	181.7 (68.2-484.2)	65.0 (24.4-173.1)	58.0 (21.8-154.5)	98.9 (37.1-263.6)	73.1 (36.6-146.2)	70.8 (35.4-141.7)	264.6 (150.2-465.8)	126.4 (81.5-195.8)	146.4 (88.2-242.8)	257.7 (134.1-495.2)	174.7 (117.1- 260.6)	219.1 (158.1-303.8)	134.3 (55.9-322.7)	203.5 (149.8- 276.3)
Puerto Rico	427.4 (160.4-1,138.9)	120.7 (30.2-482.6)	231.4 (104.0-515.1)	0 ---	71.7 (17.9-286.8)	44.3 (11.1-177.1)	94.2 (47.1-188.3)	311.1 (161.9-597.8)	149.3 (92.8-240.1)	160.3 (94.9- 270.6)	143.1 (68.2-300.1)	147.1 (95.9-225.6)	221.6 (158.3-310.1)	327.8 (206.6-520.4)	249.6 (190.2-327.5)
Peru	32.6 (4.6-231.2)	72.9 (10.3-517.4)	45.0 (11.3-180.0)	32.2 (4.5-228.5)	107.5 (26.9-429.9)	60.4 (19.5-187.3)	90.9 (34.1-242.2)	68.0 (17.0-271.7)	81.7 (36.7-181.9)	90.2 (37.5-216.6)	131.4 (42.4-407.5)	102.2 (51.1-204.3)	129.437 (75.2-222.9)	272.4 (150.9-491.9)	170.4 (114.2-254.3)
Venezuela	39.2 (9.8- 156.7)	65.1 (16.3-260.3)	48.9 (18.4-130.4)	18.1 (2.6-128.5)	87.4 (12.3-620.2)	30.0 (7.5-119.9)	237.3 (106.6-528.1)	203.8 (91.6-453.7)	219.3 (124.5-386.1)	87.4 (32.8-232.8)	100.0 (37.5-266.4)	93.3 (46.6-186.5)	106.591 (59.0-192.5)	126.0 (31.5- 503.8)	109.1 (63.4-188.0)
Mexico	61.9 (8.7-439.7)	384.1 (54.1-2726.5)	106.7 (26.7-426.5)	19.1 (2.7-135.6)	148.7 (47.9-460.9)	55.1 (20.7-146.9)	99.0 (47.2-207.7)	108.1 (27.0-432.3)	100.9 (52.5-194.0)	88.5 (36.8-212.6)	118.0 (56.2-247.3)	103.6 (58.8-182.4)	131.1 (76.1-225.7)	114.8 (37.0-356.0)	127.7 (78.2- 208.4)
China	164.4 (68.4-394.9)	53.9 (7.6-382.4)	122.5 (55.0-272.7)	109.5 (49.2-243.6)	130.9 (54.5-314.5)	118.3 (65.5-213.6)	135.6 (77.0-238.8)	187.9 (97.8-361.1)	154.0 (100.4- 236.1)	210.3 (122.1-362.2)	302.4 (182.3-501.7)	251.3 (173.5-364.0)	234.1 (141.2-388.4)	322.1 (161.1 -644.0)	258.7 (171.9-389.3)
India	76.5 (19.1-305.8)	610.1 (196.8-1,891.7)	160.9 (67.0-386.6)	184.2 (76.7-442.5)	435.4 (181.2-1,046.2)	258.9 (139.3-481.1)	86.7 (12.2-615.5)	99.1 (14.0-703.8)	92.5 (23.1-369.9)	134.0 (33.5-535.8)	272.3 (68.1-1,088.7)	179.6 (67.4-478.6)	50.1 (7.1-355.8)	247.2 (79.7-766.6)	124.7 (46.8-332.2)
Total	57.4 (33.3-98.8)	111.2 (63.1-195.8)	74.7 (50.5-110.6)	84.1 (58.8-120.3)	146.1 (99.5-214.6)	104.7 (80.6-136.1)	118.3 (91.0-153.7)	177.8 (130.4-242.4)	137.5 (112.5-167.9)	141.3 (111.6-178.9)	201.6 (155.2-262.0)	163.2 (137.0-194.5)	177.2 (149.7-209.8)	223.0 (167.5- 296.8)	187.1 (161.8-216.4)

F, females; M, males; T, total

Supplementary Table 2. Association between the sample characteristics and the mortality risk per country and pooled estimates using meta-analysis

	Countries								Pooled estimate	Heterogeneity test Q(df) p	Higgins I ² (95%CI)
	Cuba	Dom Republic	Puerto Rico	Peru	Venezuela	Mexico	China	India			
Age¹	1.04 (1.02-1.06)	1.06 (1.02-1.08)	1.04 (1.01-1.07)	1.06 (1.01-1.10)	1.02 (0.97-1.08)	1.04 (0.99-1.08)	1.06 (1.03-1.10)	0.97 (0.92-1.03)	1.04 (1.03-1.06)	9.86 (7df) p=0.20	29 (0-68)
Gender¹ (male)	1.28 (0.91-1.79)	1.77 (1.14-2.77)	1.42 (0.93-2.15)	2.31 (1.22-4.38)	1.70 (0.75-3.85)	1.52 (0.80-2.88)	1.57 (1.00-2.46)	2.74 (1.16-6.48)	1.57 (1.32-1.87)	4.96 (7df) p=0.67	0 (0-68)
Education¹ (per level)	1.09 (0.94-1.27)	1.15 (0.95-1.40)	0.98 (0.83-1.15)	0.80 (0.58-1.11)	0.93 (0.56-1.53)	1.02 (0.73-1.43)	0.93 (0.78-1.10)	1.06 (0.68-1.66)	1.01 (0.94-1.09)	5.85 (7df) p=0.56	0 (0-68)
Assets¹ (per asset)	0.88 (0.74-1.04)	0.90 (0.78-1.03)	0.78 (0.53-1.14)	1.15 (0.82-1.62)	1.04 (0.78-1.38)	1.06 (0.90-1.25)	1.07 (0.85-1.33)	0.90 (0.67-1.22)	0.96 (0.89-1.03)	6.82 (7df) p=0.45	0 (0-68)
N of impairments²	1.19 (0.84-1.70)	1.17 (1.02-1.33)	1.47 (0.70-3.09)	0.92 (0.45-1.88)	2.92 (0.51-16.44)	0.90 (0.41-1.96)	0.87 (0.50-1.52)	1.04 (0.36-2.98)	1.15 (1.03-1.29)	3.38 (7df) p=0.85	0 (0-68)
CVD risk factors²	0.94 (0.76-1.15)	0.88 (0.63-1.22)	1.00 (0.75-1.34)	1.53 (0.93-2.51)	1.18 (0.50-2.78)	1.03 (0.70-1.52)	0.78 (0.61-1.01)	0.84 (0.40-1.78)	0.94 (0.84-1.05)	6.70 (7df) p=0.46	0 (0-68)
Undernutrition²	1.64 (1.10-2.43)	1.28 (0.68-2.43)	2.32 (0.92-5.89)	3.53 (1.37-9.12)	6.51 (1.63-26.07)	0.96 (0.42-2.18)	0.69 (0.15-3.21)	0.40 (0.12-1.26)	1.55 (1.19-2.02)	15.64(7df) p=0.03	55 (1-80)
Access to any treatment²	0.88 (0.63-1.24)	1.37 (0.89-2.12)	0.88 (0.39-1.96)	1.46 (0.74-2.88)	2.64 (0.74-9.39)	0.91 (0.46-1.79)	1.15 (0.67-1.96)	0.38 (0.13-1.10)	1.05 (0.86-1.28)	9.36 (7df) p=0.23	25 (0-66)
Depression²	1.72 (0.99-2.98)	0.86 (0.48-1.54)	0.47 (0.10-2.08)	1.11 (0.36-3.44)	0.34 (0.04-2.68)	1.27 (0.48-3.38)	1.97 (0.81-4.83)	0.23 (0.03-1.91)	1.17 (0.86-1.60)	9.36 (7df) p=0.23	25 (0-66)
AD²	1.04 (0.73-1.50)	0.96 (0.57-1.62)	1.00 (0.51-1.95)	2.06 (0.96-4.41)	0.75 (0.20-2.77)	1.00 (0.45-2.22)	0.76 (0.44-1.30)	1.04 (0.25-4.44)	1.01 (0.82-1.26)	4.68 (7df) p=0.70	0 (0-68)
VAD²	1.22 (0.70-2.10)	1.04 (0.59-1.81)	1.34 (0.67-2.67)	2.44 (0.94-6.34)	1.10 (0.24-4.95)	0.89 (0.28-2.76)	1.33 (0.73-2.44)	---	1.26 (0.96-1.65)	2.75 (6df) p=0.84	0 (0-71)
LBD²	0.93 (0.33-2.64)	0.49 (0.15-1.60)	0.57 (0.07-4.52)	2.16 (0.40-11.66)	5.91 (0.42-81.25)	4.70 (0.85-26.08)	---	1.97 (0.20-19.1)	1.18 (0.66-2.12)	7.42 (6df) p=0.28	19 (0-63)
FTD²	0.89 (0.27-2.99)	0.43 (0.10-1.84)	0.82 (0.11-6.34)	0.21 (0.02-1.73)	---	0.70 (0.16-3.15)	0.41 (0.05-3.14)	---	0.59 (0.31-1.14)	1.73 (5df) p=0.89	0 (0-68)
Dementia severity (per CDR level)³	1.67 (1.37-2.04)	1.17 (0.87-1.57)	1.33 (0.82-2.14)	1.50 (0.96-2.36)	3.52 (1.13-10.96)	1.03 (0.52-2.06)	2.05 (1.26-3.33)	2.33 (0.52-10.45)	1.52 (1.33-1.74)	9.27 (7df) p=0.23	24 (0-66)
NPI⁴	1.04 (1.00-1.07)	1.03 (0.99-1.06)	1.04 (0.99-1.10)	1.04 (0.98-1.11)	1.03 (0.92-1.15)	0.96 (0.90-1.02)	1.02 (0.95-1.11)	0.91 (0.76-1.09)	1.03 (1.01-1.05)	7.15 (7df) p=0.41	2 (0-68)
COGSCORE⁵	0.96 (0.94-0.98)	0.97 (0.94-0.99)	0.99 (0.97-1.01)	0.93 (0.90-0.97)	0.90 (0.83-0.98)	0.98 (0.94-1.03)	0.99 (0.97-1.01)	0.98 (0.90-1.06)	0.97 (0.96-0.98)	16.32 (7df) p=0.02	57 (6-80)

CVD, cardiovascular disease; AD, Alzheimer's disease; VaD, vascular dementia; LBD, Lewy body dementia; FTD, frontotemporal dementia; CDR, Clinical Dementia Rating; NPI, Neuropsychiatric Inventory

¹Adjusted for age, gender, education and assets

²Adjusted for all variables in model (1) plus number of impairments, CV risk factors, undernutrition, access to any treatment, depression, AD, VaD, LBD, FTD

³Adjusted for all variables from models (1) and (2) plus dementia severity (CDR)

⁴Adjusted for all variables from models (1) and (2) plus NPI

⁵Adjusted for all variables from models (1) and (2) plus COGSCORE