

Table E1. Mortality Risks from All and Specific Causes in 41 486 Male FGI MDs (FGI) versus 46 846 Male Psychiatrists According to Time since Medical School Graduation, 1979–2008

Cause of Death	<20 years		20–29 years		30–39 years		40+ years		P Value
	Deaths (FGI/Psych)	RR*	Deaths (FGI/Psych)	RR*	Deaths (FGI/Psych)	RR	Deaths (FGI/Psych)	RR*	
All causes of death	177/547	0.36 (0.31, 0.43)	308/763	0.62 (0.54, 0.71)	622/1386	0.84 (0.76, 0.92)	2313/4611	0.88 (0.84, 0.93)	<.001
All malignant neoplasms	66/91	0.91 (0.66, 1.26)	111/212	0.83 (0.65, 1.05)	238/464	0.94 (0.80, 1.10)	725/1387	0.92 (0.84, 1.00)	>.50
Digestive organs	19/16	1.61 (0.81, 3.19)	33/69	0.73 (0.48, 1.12)	66/152	0.77 (0.57, 1.03)	196/382	0.89 (0.75, 1.06)	.20
Stomach	1/1	1.48 (0.09, 23.7)	5/12	0.59 (0.2, 1.71)	8/16	0.83 (0.35, 1.96)	19/31	1.03 (0.58, 1.83)	>.50
Colon excluding rectum	6/6	1.09 (0.34, 3.47)	10/20	0.70 (0.32, 1.52)	17/51	0.65 (0.37, 1.13)	61/125	0.85 (0.63, 1.16)	>.50
Liver and intrahepatic bile duct	1/3	0.59 (0.06, 5.74)	5/6	1.62 (0.48, 5.40)	6/17	0.53 (0.21, 1.35)	19/33	1.03 (0.58, 1.81)	.46
Respiratory and intrathoracic organs	3/7	0.54 (0.13, 2.26)	19/39	0.98 (0.55, 1.72)	57/92	1.15 (0.82, 1.60)	149/288	0.91 (0.74, 1.11)	>.50
Lung and bronchus	3/7	0.54 (0.13, 2.26)	19/39	0.98 (0.55, 1.72)	54/89	1.13 (0.8, 1.59)	140/279	0.88 (0.72, 1.08)	>.50
Skin	3/16	0.22 (0.065, 0.78)	4/14	0.42 (0.13, 1.32)	9/15	1.03 (0.45, 2.36)	28/34	1.42 (0.86, 2.34)	.01
Melanoma	3/7	0.49 (0.12, 1.96)	4/14	0.42 (0.13, 1.32)	7/14	0.85 (0.34, 2.12)	22/23	1.62 (0.90, 2.91)	.10
Breast	0/1	NA	0/1	NA	0/2	NA	2/0	NA	.045
Genitourinary organs	3/5	0.82 (0.18, 3.73)	12/17	1.20 (0.55, 2.59)	34/55	1.23 (0.80, 1.91)	135/308	0.77 (0.63, 0.94)	.22
Urinary bladder	0/1	NA	1/2	0.72 (0.06, 8.06)	4/6	1.33 (0.36, 4.86)	13/34	0.68 (0.36, 1.29)	>.50
Brain and central nervous system (including benign)	9/13	0.72 (0.30, 1.71)	7/19	0.47 (0.20, 1.14)	18/31	0.99 (0.55, 1.78)	21/60	0.60 (0.36, 0.98)	.49
Brain and central nervous system malignancy	9/12	0.74 (0.31, 1.78)	7/18	0.49 (0.20, 1.20)	18/29	1.08 (0.60, 1.97)	20/53	0.64 (0.38, 1.08)	.45
Total leukemia	4/5	0.97 (0.25, 3.77)	9/12	1.15 (0.47, 2.78)	12/26	0.86 (0.43, 1.72)	49/56	1.53 (1.04, 2.25)	>.50
Leukemia excluding chronic lymphocytic leukemia	3/3	1.48 (0.28, 7.9)	6/7	1.24 (0.41, 3.76)	7/12	1.00 (0.39, 2.55)	19/28	1.17 (0.65, 2.1)	>.50
Total lymphoma	9/15	0.82 (0.35, 1.92)	15/18	1.29 (0.64, 2.6)	12/26	0.82 (0.41, 1.64)	31/85	0.64 (0.42, 0.97)	.41
Infectious diseases	18/119	0.15 (0.09, 0.24)	7/59	0.15 (0.07, 0.33)	11/37	0.49 (0.25, 0.96)	45/79	1.00 (0.70, 1.45)	<.001
Septicemia	0/2	NA	1/1	2.03 (0.12, 34.5)	5/9	0.92 (0.30, 2.80)	23/35	1.19 (0.70, 2.01)	.34
Diseases of blood-forming tissue	1/2	0.41 (0.04, 4.58)	2/4	0.92 (0.16, 5.1)	5/5	2.08 (0.59, 7.3)	7/19	0.63 (0.26, 1.50)	.43
All endocrine disorders	0/18	NA	8/17	0.76 (0.32, 1.79)	24/27	1.70 (0.97, 3.0)	64/145	0.78 (0.58, 1.05)	<.001
Disorders of the thyroid gland	0/0	NA	0/0	NA	0/0	NA	0/1	NA	NA
Diabetes mellitus	0/5	NA	7/10	1.16 (0.43, 3.14)	17/21	1.59 (0.82, 3.06)	50/106	0.83 (0.60, 1.17)	.06

Neurologic and mental conditions	2/7	0.32 (0.06, 1.60)	5/18	0.33 (0.12, 0.92)	17/37	0.87 (0.48, 1.55)	125/218	1.03 (0.83, 1.29)	.06
All circulatory diseases	29/77	0.51 (0.33, 0.80)	79/217	0.65 (0.50, 0.85)	234/511	0.88 (0.76, 1.04)	957/1837	0.91 (0.84, 0.99)	.007
Ischemic heart disease	13/38	0.49 (0.25, 0.93)	58/153	0.68 (0.50, 0.93)	154/338	0.87 (0.72, 1.06)	581/1077	0.94 (0.85, 1.04)	.05
Cerebrovascular diseases	2/8	0.31 (0.06, 1.54)	8/17	1.00 (0.41, 2.38)	26/49	1.04 (0.64, 1.70)	134/263	0.91 (0.74, 1.12)	>.50
All diseases of the respiratory system	3/7	0.46 (0.12, 1.79)	6/19	0.55 (0.21, 1.40)	20/63	0.70 (0.42, 1.16)	153/339	0.80 (0.66, 0.97)	>.50
Pneumonia and influenza	1/5	0.22 (0.02, 1.91)	1/10	0.17 (0.02, 1.38)	4/17	0.5 (0.17, 1.52)	50/105	0.84 (0.60, 1.18)	.15
Chronic obstructive pulmonary disease and allied conditions	1/1	0.92 (0.06, 14.72)	3/4	1.39 (0.29, 6.58)	12/26	1.1 (0.55, 2.19)	58/142	0.72 (0.53, 0.98)	>.50
All gastrointestinal diseases	0/19	NA	13/23	0.87 (0.43, 1.73)	19/43	0.85 (0.49, 1.48)	60/127	0.82 (0.61, 1.12)	<.001
Chronic liver disease and cirrhosis	0/5	NA	7/14	0.71 (0.28, 1.79)	7/19	0.65 (0.27, 1.57)	22/40	0.94 (0.56, 1.58)	.19
All genitourinary diseases	1/2	0.71 (0.05, 9.32)	2/3	0.78 (0.13, 4.83)	5/6	1.91 (0.56, 6.45)	38/88	0.77 (0.53, 1.13)	>.50
Accidents and adverse effects	50/157	0.35 (0.25, 0.48)	50/132	0.53 (0.38, 0.74)	37/130	0.51 (0.35, 0.73)	78/181	0.75 (0.58, 0.98)	.004
Suicide and self-inflicted injury	18/109	0.19 (0.11, 0.31)	25/80	0.44 (0.28, 0.70)	13/97	0.22 (0.13, 0.40)	23/76	0.52 (0.32, 0.83)	.007
Homicide and legal intervention	2/12	0.16 (0.03, 0.72)	4/9	0.56 (0.17, 1.87)	3/8	0.65 (0.17, 2.47)	2/5	0.68 (0.13, 3.51)	.42

Note.—Data in parentheses are 95% CIs. FGI/Psych = FGI MD/Psychiatrist, NA = not applicable.

* Stratified by year of attained age (30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79, and ≥80 years) and year of birth (1910–1919, 1920–1929, 1930–1939, 1940–1949, 1950–1959, 1960–1969, and 1970–1982).

Table E2. Mortality Risks from All and Specific Causes in 4148 Female FGI MDs versus 17 555 Female Psychiatrists, 1979–2008

Cause of Death	<1940		1940–1959		1960–1979		≥1980		P Value	Overall	
	Deaths (FGI/Psych h)	RR*	Deaths (FGI/Psych h)	RR*	Deaths (FGI/Psych h)	RR*	Deaths (FGI/Psych h)	RR*		Deaths (FGI/Psych h)	RR*
All causes of death	3/22	0.47 (0.14, 1.57)	41/179	1.04 (0.74, 1.46)	25/179	0.73 (0.48, 1.11)	17/127	0.59 (0.35, 0.98)	.20	86/507	0.80 (0.63, 1.00)
All malignant neoplasms	0/7	NA	18/71	1.18 (0.7, 1.98)	13/88	0.77 (0.43, 1.39)	6/51	0.56 (0.24, 1.31)	.13	37/217	0.83 (0.58, 1.18)
Breast	0/0	NA	2/2	1.87 (0.26, 13.33)	0/2	NA	0/0	NA	.11	2/4	0.83 (0.15, 4.56)
Brain and central nervous system (including benign)	0/0	NA	0/2	NA	0/5	NA	0/4	NA	>.50	0/11	NA
Brain and central nervous system malignancy	0/0	NA	0/2	NA	0/5	NA	0/4	NA	>.50	0/11	NA
Total leukemia	0/0	NA	0/5	NA	0/4	NA	0/3	NA	>.50	0/12	NA
Leukemia excluding CLL	0/0	NA	0/4	NA	0/2	NA	0/2	NA	>.50	0/8	NA

Acute myeloid leukemia and myelodysplastic syndrome	0/0	NA	0/3	NA	0/0	NA	0/2	NA	>.50	0/5	NA
All circulatory diseases	2/6	1.12 (0.22, 5.5)	8/52	0.66 (0.32, 1.40)	1/32	0.16 (0.02, 1.18)	2/11	0.92 (0.2, 4.2)	.33	13/101	0.58 (0.32, 1.03)
Ischemic heart disease	0/4	NA	5/22	1.00 (0.38, 2.64)	0/14	NA	1/5	1.18 (0.14, 10.15)	.13	6/45	0.62 (0.26, 1.46)
Cerebrovascular diseases	1/0	NA	2/14	0.59 (0.13, 2.61)	0/8	NA	0/1	NA	.12	3/23	0.56 (0.17, 1.86)

Note.—Data in parentheses are 95% CIs. FGI/Psych = FGI MD/Psychiatrist, NA = not applicable.

* Stratified by year of attained age (30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79, and ≥80 years), year of birth (1910–1919, 1920–1929, 1930–1939, 1940–1949, 1950–1959, 1960–1969, and 1970–1982), and year of medical school graduation (<1940, 1940–1959, 1960–1979, and ≥1980).

Table E3. Mortality Risks from All and Specific Causes in Male FGI MDs versus Male Psychiatrists Who Were Confirmed Alive or Deceased According to Year of Medical School Graduation, 1979–2008

Cause of Death	<1940		1940–1959		1960–1979		≥1980		P Value	Overall	
	Deaths (FGI/Psych h)	RR*	Deaths (FGI/Psych h)	RR*	Deaths (FGI/Psych h)	RR*	Deaths (FGI/Psych h)	RR*		Deaths (FGI/Psych h)	RR*
All causes of death	376/624	0.89 (0.78, 1.01)	2183/4549	0.87 (0.83, 0.91)	712/1803	0.60 (0.54, 0.65)	149/331	0.40 (0.33, 0.49)	<.001	3420/7307	0.77 (0.74, 0.80)
All malignant neoplasms	98/153	0.95 (0.74, 1.23)	713/1381	0.94 (0.85, 1.02)	273/562	0.75 (0.65, 0.87)	56/58	0.97 (0.66, 1.42)	.08	1140/2154	0.89 (0.83, 0.96)
Brain and central nervous system (including benign)	2/9	0.33 (0.07, 1.53)	25/61	0.74 (0.46, 1.18)	19/41	0.62 (0.36, 1.08)	9/12	0.70 (0.29, 1.71)	>.50	55/123	0.66 (0.48, 0.92)
Brain and central nervous system malignancy	1/8	0.19 (0.02, 1.5)	25/56	0.8 (0.5, 1.3)	19/37	0.7 (0.4, 1.23)	9/11	0.73 (0.3, 1.8)	.48	54/112	0.71 (0.51, 1.00)
Total leukemia	10/4	3.7 (1.16, 11.8)	43/59	1.32 (0.9, 1.96)	19/34	0.88 (0.49, 1.55)	2/2	0.90 (0.12, 6.63)	.14	74/99	1.26 (0.93, 1.7)
Leukemia excluding CLL	4/1	5.91 (0.66, 52.8)	17/32	0.95 (0.53, 1.71)	12/16	1.08 (0.51, 2.31)	2/1	1.47 (0.13, 16.2)	.36	35/50	1.12 (0.72, 1.72)
Acute myeloid leukemia and myelodysplastic syndrome	2/1	2.96 (0.27, 32.7)	19/30	1.14 (0.64, 2.03)	11/10	1.60 (0.67, 3.81)	0/0	NA	>.50	32/41	1.31 (0.82, 2.09)
All circulatory diseases	197/312	0.94 (0.78, 1.12)	874/1791	0.89 (0.82, 0.96)	204/484	0.70 (0.59, 0.82)	24/55	0.42 (0.26, 0.69)	.001	1299/2642	0.84 (0.79, 0.90)
Ischemic heart disease	119/201	0.88 (0.7, 1.1)	540/1084	0.90 (0.81, 1.00)	135/291	0.76 (0.62, 0.94)	12/30	0.41 (0.2, 0.81)	.07	806/1606	0.86 (0.80, 0.94)
Cerebrovascular diseases	28/38	1.09 (0.67, 1.77)	118/229	0.93 (0.75, 1.16)	23/64	0.66 (0.41, 1.07)	1/6	0.13 (0.01, 1.06)	.07	170/337	0.88 (0.73, 1.06)

Note.—Data in parentheses are 95% CIs. CLL = chronic lymphocytic leukemia, FGI/Psych = FGI MD/Psychiatrist, NA = not applicable.

* Stratified by year of attained age (30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79, and ≥80 years), year of birth (1910–1919, 1920–1929, 1930–1939, 1940–1949, 1950–1959, 1960–1969, and 1970–1982), and year of medical school graduation (<1940, 1940–1959, 1960–1979, and ≥1980).

Table E4. Standardized Mortality Ratios and 95% Confidence Intervals for All and Specific Causes of Death in 45 634 FGI MDs and in 64 401 Psychiatrists versus the General U.S. Population, 1979–2008

Cause of death	FGI MDs vs General Population		Psychiatrists vs General Population	
	No. Observed	SMR*	No. Observed	SMR*
All causes	3506	0.38 (0.37, 0.40)	7814	0.50 (0.49, 0.52)
All malignant neoplasms	1177	0.47 (0.45, 0.50)	2371	0.54 (0.51, 0.56)
Malignant and benign neoplasms of brain and CNS	55	0.73 (0.55, 0.95)	134	1.09 (0.91, 1.29)
Malignant brain/CNS	54	0.80 (0.6, 1.05)	123	1.12 (0.93, 1.34)
Total leukemia	74	0.80 (0.63, 1.01)	111	0.70 (0.57, 0.84)
Leukemia excluding chronic lymphocytic leukemia	35	0.64 (0.44, 0.89)	58	0.62 (0.47, 0.80)
CLL				
Acute myeloid leukemia plus myelodysplastic syndrome	32	0.65 (0.44, 0.92)	46	0.53 (0.39, 0.71)
All circulatory diseases	1312	0.39 (0.37, 0.41)	2743	0.47 (0.45, 0.48)
Ischemic heart disease	812	0.41 (0.38, 0.44)	1651	0.48 (0.45, 0.50)
Cerebrovascular disease	173	0.42 (0.36, 0.49)	360	0.48 (0.43, 0.53)

Note.—Data in parentheses are 95% CIs. SMR = standardized mortality ratio.

* Stratified by year of attained age (30–34, 35–39, 40–44, 45–49, 50–54, 55–59, 60–64, 65–69, 70–74, 75–79, and ≥80 years), year of birth (1910–1919, 1920–1929, 1930–1939, 1940–1949, 1950–1959, 1960–1969, and 1970–1982), and year of medical school graduation (<1940, 1940–1959, 1960–1979, and ≥1980).