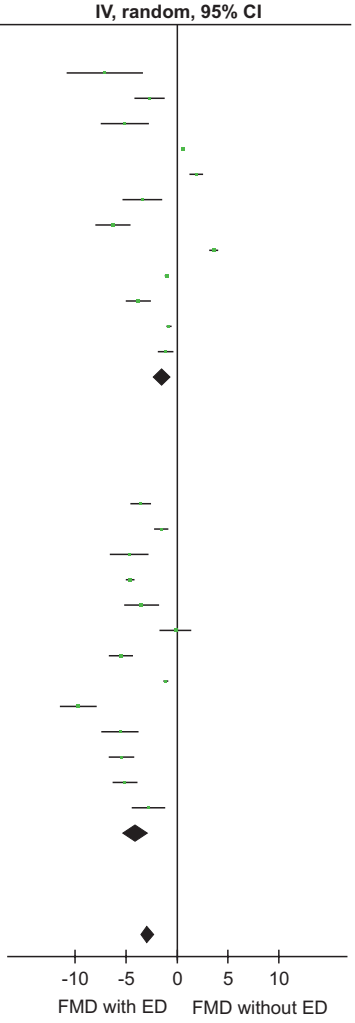
Study or subgroup	ED Mean	ED SD	ED Total	Control Mean	Control SD	Control Total	Weight	Mean difference IV, random, 95% CI
1.2.1 Age >55 y								
Averbeck 2012 Porto Alegre, Brazil	4.24	7.06	34	11.33	6.08	18	2.0%	-7.09 [-10.77, -3.41]
Bhatia 2013 Lucknow, India	6.4	4.6	163	9.1	4.87	62	3.9%	-2.70 [-4.10, -1.30]
Esposito 2007 Naples, Italy	5.5426	5.4489	30	10.664	2.952	20	3.1%	-5.12 [-7.46, -2.78]
Gerber 2015 Massachusetts, England	7.2	0.24	277	6.6	0.33	112	4.7%	0.60 [0.53, 0.67]
Ioakeimidis 2016 Athens, Greece	7.6	2	180	5.7	1.9	50	4.5%	1.90 [1.30, 2.50]
Javaroni 2011 Brazil	7.1	3.3	74	10.5	4.5	26	3.5%	-3.40 [-5.29, -1.51]
Kaya 2006 Istanbul, Turkey	6.01	2.9	32	12.3	3.5	25	3.6%	-6.29 [-7.99, -4.59]
Lojanapiwat 2009 Chiang Mai, Thailand	8.7	1	41	5.1	0.6	30	4.6%	3.60 [3.23, 3.97]
Murata 2012 Saitama, Japan	2.84	0.34	42	3.82	0.39	58	4.6%	-0.98 [-1.12, -0.84]
Simsek 2014 Istanbul, Turkey	7.1	4.07	150	10.9	3.6	50	4.1%	-3.80 [-4.99, -2.61]
Stuckey 2006 Nedlands, Australia	3.69	0.44	49	4.47	0.48	50	4.6%	-0.78 [-0.96, -0.60]
Vlachopoulos 2008 Athens, Greece	2.96	1.64	52	4.07	1.68	34	4.4%	-1.11 [-1.83, -0.39]
Subtotal (95% CI)			**1,124**			**535**	**47.7%**	**-1.44 [-2.29, -0.60]**
Heterogeneity: Tau^2=1.80; Chi^2=1,028.18, df=11 (p<0.00001); I^2=99%								
Test for overall effect: Z=3.36 (p=0.0008)								
1.2.2 Age ≤55 y								
Chen 2016 Guangzhou, China	9.44	2.7	261	13	2.89	40	4.3%	-3.56 [-4.51, -2.61]
Chiurlia 2005 Modena, Italy	2.36	1.75	70	3.92	2.2	73	4.5%	-1.56 [-2.21, -0.91]
Esposito 2008 Naples, Italy	5.8	4.1	30	10.5	2.55	20	3.5%	-4.70 [-6.54, -2.86]
Esposito 2009 Naples, Italy	5.9	0.6	30	10.5	0.9	30	4.6%	-4.60 [-4.99, -4.21]
Foresta 2006 Padova, Italy	9.2	3.2	26	12.7	2.7	23	3.7%	-3.50 [-5.15, -1.85]
Guaraldi 2012 Modena, Italy	7.14	4.89	79	7.27	4	54	3.8%	-0.13 [-1.65, 1.39]
Huang 2020 Guangzhou, China	8.72	2.67	52	14.24	2.13	22	4.1%	-5.52 [-6.67, -4.37]
Kaiser 2004 USA	1.3	0.3	30	2.4	0.3	27	4.6%	-1.10 [-1.26, -0.94]
Mazo 2006 Moscow, Russia	5	2.8	38	14.7	3	15	3.6%	-9.70 [-11.46, -7.94]
Uslu 2005 Istanbul, Turkey	4.1	3.1	30	9.7	3.5	25	3.6%	-5.60 [-7.36, -3.84]
Yao 2012 Guangzhou, China	7.81	2.44	122	13.28	3.29	33	4.1%	-5.47 [-6.67, -4.27]
Yao 2013 Guangzhou, China	8.16	2.43	192	13.3	3.25	33	4.1%	-5.14 [-6.30, -3.98]
Yavuzgil 2005 Izmir, Turkey	3.2	3	36	6	4	39	3.7%	-2.80 [-4.39, -1.21]
Subtotal (95% CI)			**996**			**434**	**52.3%**	**-4.06 [-5.37, -2.75]**
Heterogeneity: Tau^2=5.40; Chi^2=513,68, df=12 (p<0.00001); I^2=98%								
Test for overall effect: Z=6.06 (p<0.00001)								
Total (95% CI)			**2,120**			**969**	**100.0%**	**-2.86 [-3.56, -2.17]**
Heterogeneity: Tau^2=2.73; Chi^2=2,366.16, df=24 (p<0.00001); I^2=99%								
Test for overall effect: Z=8.04 (p<0.00001)								
Test for subgroup differences: Chi^2=10.80, df=1 (p=0.001); I^2=90.7%								



Supplement Fig. 1. Subgroup meta-analysis of studies on the relationship between erectile dysfunction (ED) and flow-mediated dilatation (FMD) stratified by population age. SD: standard deviation, CI: confidence interval.