Appendix 1 (as supplied by the authors): Search strategy and flow chart

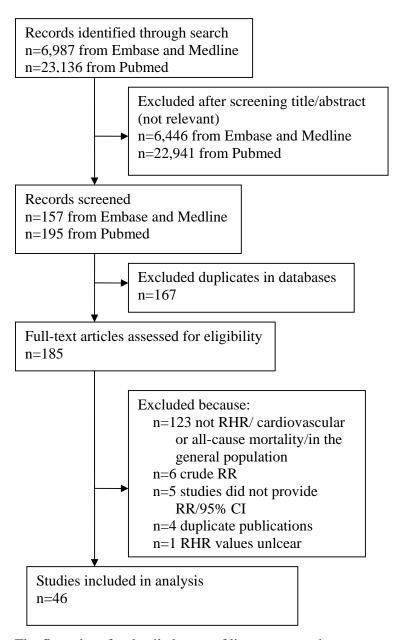
Search strategy

Pubmed

Search	Query	Results
#1	death	619,,465
#2	mortality	897,484
#3	heart rate	279,341
#4	pulse rate	299,082
#5	prospective	664,539
#6	cohort	354,084
#7	longitudinal	194,680
#8	follow up	958,259
#9	follow-up	953,480
#10	#1 OR #2	1,343,452
#11	#3 OR #4	299,082
#12	#5 OR #6 OR #7 OR #8	1,704,723
#13	#10 AND #11 AND #12	23,136

Embase and Medline

Search	Query	Results
#1	death	896,156
#2	moraltiy	1,021,843
#3	heart rate	242,844
#4	pulse rate	49,794
#5	prospective	637,775
#6	cohort	494,978
#7	longitudinal	227,832
#8	follow up	1,291,247
#9	follow-up	1,291,247
#10	#1 OR #2	1,698,565
#11	#3 OR #4	287,491
#12	#5 OR #6 OR #7 OR #8	2,220,126
#13	#10 AND #11 AND #12	6,987



The flow chart for detailed steps of literature search There are 6 studies only providing crude RR^{1-6} , 5 studies did not provide RR/95% CI^{7-11} , 4 duplicate publications 12-15 and 1 study with unclear RHR values 16.

References

- 1. Dyer AR, Persky V, Stamler J, Paul O, Shekelle RB, Berkson DM, et al. Heart rate as a prognostic factor for coronary heart disease and mortality: findings in three Chicago epidemiologic studies. *Am J Epidemiol* 1980;112:736-749.
- 2. Wannamethee G, Shaper AG, Macfarlane PW. Heart rate, physical activity, and mortality from cancer and other noncardiovascular diseases. *Am J Epidemiol* 1993;137:735-748.
- 3. Fujiura Y, Adachi H, Tsuruta M, Jacobs DR, Jr., Hirai Y, Imaizumi T. Heart rate and mortality in a Japanese general population: an 18-year follow-up study. *J Clin Epidemiol* 2001;54:495-500.
- 4. Perk G, Stessman J, Ginsberg G, Bursztyn M. Sex differences in the effect of heart rate on mortality in the elderly. *J Am Geriatr Soc* 2003;51:1260-1264.
- 5. Gulati M, Shaw LJ, Thisted RA, Black HR, Bairey Merz CN, Arnsdorf MF. Heart rate response to exercise stress testing in asymptomatic women: the st. James women take heart project. *Circulation* 2010;122:130-137.
- 6. Rozanski A, Gransar H, Min JK, Hayes SW, Friedman JD, Thomson LE, et al. Long-term mortality following normal exercise myocardial perfusion SPECT according to coronary disease risk factors. *J Nucl Cardiol* 2014;21:341-350.
- 7. Kannel WB, Kannel C, Paffenbarger RS, Jr., Cupples LA. Heart rate and cardiovascular mortality: the Framingham Study. *Am Heart J* 1987;113:1489-1494.
- 8. Gillum RF. The epidemiology of resting heart rate in a national sample of men and women: associations with hypertension, coronary heart disease, blood pressure, and other cardiovascular risk factors. *Am Heart J* 1988;116:163-174.
- 9. Menotti A, Mulder I, Nissinen A, Feskens E, Giampaoli S, Tervahauta M, et al. Cardiovascular risk factors and 10-year all-cause mortality in elderly European male populations; the FINE study. Finland, Italy, Netherlands, Elderly. *Eur Heart J* 2001;22:573-579.
- 10. Pitsavos C, Panagiotakos DB, Menotti A, Chrysohoou C, Skoumas J, Stefanadis C, et al. Forty-year follow-up of coronary heart disease mortality and its predictors: the Corfu cohort of the seven countries study. *Prev Cardiol* 2003;6:155-160.
- 11. Menotti A, Lanti M, Maiani G, Kromhout D. Determinants of longevity and all-cause mortality among middle-aged men. Role of 48 personal characteristics in a 40-year follow-up of Italian Rural Areas in the Seven Countries Study. *Aging Clin Exp Res* 2006;18:394-406.
- 12. Hartaigh BO, Allore HG, Trentalange M, McAvay G, Pilz S, Dodson JA, et al. Elevations in time-varying resting heart rate predict subsequent all-cause mortality in older adults. *Eur J Prev Cardiol* 2014.
- 13. Jensen MT, Marott JL, Allin KH, Nordestgaard BG, Jensen GB. Resting heart rate is associated with cardiovascular and all-cause mortality after adjusting for inflammatory markers: the Copenhagen City Heart Study. *Eur J Prev Cardiol* 2012;19:102-108.
- 14. Jouven X, Empana JP, Schwartz PJ, Desnos M, Courbon D, Ducimetiere P.

- Heart-rate profile during exercise as a predictor of sudden death. *N Engl J Med* 2005;352:1951-1958.
- 15. Chen J, Chen SH, Liu X, Zhang CF, Yao T, Yang H, et al. [Relationship between baseline heart rate and all-cause death in general population]. *Zhonghua Liu Xing Bing Xue Za Zhi* 2013;34:622-625.
- 16. Menotti A, Kromhout D, Nissinen A, Giampaoli S, Seccareccia F, Feskens E, et al. Short-term all-cause mortality and its determinants in elderly male populations in Finland, The Netherlands, and Italy: the FINE Study. Finland, Italy, Netherlands Elderly Study. *Prev Med* 1996;25:319-326.