

Table S1. The information and odds ratios of the 46 papers (sorted in year of publication).

| First author (published year) | Country of origin | Number of participants | Gender | Study design | Diagnosis method | Working class | Health measure | Reference working hours | Working hours | Occupational health condition | OR | 95% CI |
|-----------------------------------|-------------------|--------------------------|-----------------|--------------------------------------|------------------|---------------|------------------------------|-------------------------|---------------|-------------------------------|-------|-------------|
| Sokejima (1998) ^a [1] | Japan | 526 | Male | Case-control study | HME | Yes | Acute myocardial infarction | ≤7-9h/d | 9-11h/d | PH | 0.960 | 0.578-1.594 |
| | | | | | | | | | >11h/d | PH | 2.940 | 0.139-6.234 |
| Nakanishi (2001) ^a [2] | Japan | 1266 | Male | Prospective cohort study (5 years) | HME | Yes | Type 2 diabetes | <8h/d | 8-8.9h/d | PH | 0.947 | 0.496-1.808 |
| | | | | | | | | | 9-9.9h/d | PH | 0.447 | 0.177-1.132 |
| | | | | | | | | | 10-10.9h/d | PH | 0.469 | 0.173-1.272 |
| | | | | | | | | | ≥11h/d | PH | 0.375 | 0.126-1.116 |
| Nakanishi (2001) ^a [3] | Japan | 941 | Male | Prospective cohort study (5 years) | HME | Yes | Hypertension | <8h/d | 8-8.9h/d | PH | 0.769 | 0.435-1.361 |
| | | | | | | | | | 9-9.9h/d | PH | 1.001 | 0.550-1.823 |
| | | | | | | | | | 10-10.9h/d | PH | 0.534 | 0.254-1.123 |
| | | | | | | | | | ≥11h/d | PH | 0.223 | 0.077-0.647 |
| Liu (2002) ^a [4] | Japan | 705 | Male | Case-control study | HME | Yes | Acute myocardial infarction | ≤40 h/w | 41-60h/w | PH | - | - |
| | | | | | | | | | >61h/w | PH | 1.800 | 0.991-3.270 |
| Akerstedt (2002) ^a [5] | Sweden | 58115 (M:30524; F:27591) | Male and female | Prospective cohort study (20 years) | SR | Yes | Disturbed sleep Fatigue | ≤50 h/w | >50 h/w | RH | 1.050 | 0.911-1.211 |
| | | | | | | | | | >50 h/w | RH | 1.350 | 1.231-1.481 |
| Tarumi (2003) [6] | Japan | 867 (M:778; F:89) | Male and female | Prospective cohort study (3.6 years) | SR | Yes | Mental disorders | ≤44h/w | 45-49.9h/w | MH | 1.333 | 0.442-4.013 |
| | | | | | | | | | ≥50h/w | MH | 1.321 | 0.439-3.980 |
| | | | | | | | Circulatory disorders | | 45-49.9h/w | PH | 1.553 | 0.744-3.240 |
| | | | | | | | | | ≥50h/w | PH | 1.220 | 0.560-2.655 |
| Fukuoka (2005) ^a [7] | Japan | 94 (M:92; F:2) | Male and female | Cross-sectional study | HME | Yes | Acute myocardial infarction | <55h/w | ≥55h/w | PH | 0.870 | 0.236-3.206 |
| Uchiyama (2005) ^a [8] | Japan | 1615 (M:908; F:707) | Male | Prospective cohort study (5.6 years) | HME | Yes | Cardiovascular heart disease | ≤9h/d | ≥10h/d | PH | 1.204 | 0.561-2.582 |
| | | | | | | | | | ≥10h/d | PH | 0.388 | 0.022-6.727 |
| Grosch (2006) ^a [9] | The US | | | | SR | Yes | Job stress | ≤40h/w | 41-48h/w | MH | 1.160 | 0.840-1.601 |
| | | | | | | | | | 49-69h/w | MH | 1.790 | 1.351-2.372 |

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| | | 1744 (M:849; F:895) | Male and female | Cross- sectional study | | | | | ≥70h/w | MH | 2.490 | 1.561-3.972 |
| | | | | | | | Hurt | | 41-48h/w | RH | 0.860 | 0.515-1.436 |
| | | | | | | | | | 49-69h/w | RH | 1.240 | 0.810-1.899 |
| | | | | | | | General Health | | ≥70h/w | RH | 1.870 | 0.993-3.521 |
| | | | | | | | | | 41-48h/w | NH | 0.900 | 0.570-1.421 |
| | | | | | | | | | 49-69h/w | NH | 0.540 | 0.338-0.864 |
| | | | | | | | Poor mental health | | ≥70h/w | NH | 1.940 | 1.071-3.514 |
| | | | | | | | | | 41-48h/w | MH | 1.050 | 0.671-1.643 |
| | | | | | | | | | 49-69h/w | MH | 1.020 | 0.676-1.540 |
| | | | | | | | Poor physical health | | ≥70h/w | MH | 1.590 | 0.851-2.972 |
| | | | | | | | | | 41-48h/w | PH | 0.820 | 0.429-1.567 |
| | | | | | | | | | 49-69h/w | PH | 0.740 | 0.398-1.374 |
| | | | | | | | | | ≥70h/w | PH | 5.020 | 2.488-10.130 |
| Sekine (2006) ^a [10] | Japan | 3556 (M:2397; F:1159) | Male Female | Cross- sectional study | SR | Yes | Poor sleep quality | 7-9h/d | 9-11h/d | RH | 1.110 | 0.839-1.468 |
| | | | | | | | | | <11h/d | RH | 1.490 | 1.031-2.153 |
| | | | | | | | | | 9-11h/d | RH | 1.320 | 0.948-1.837 |
| | | | | | | | | | <11h/d | RH | 2.020 | 1.236-3.300 |
| Yang (2006) ^a [11] | The US | 24205 (M:13724; F:10481) | Male and female | Cross- sectional study | SR | Yes | Hypertension | 11-39h/w | 41-50h/w | PH | 1.170 | 1.035-1.323 |
| | | | | | | | | | ≥51h/w | PH | 1.290 | 1.097-1.516 |
| Nagashima (2007) ^a [12] | Japan | 715 | Male | Cross- sectional study | SR | No | Fatigue | <50h/w | 50- <50h/w | RH | 0.900 | 0.570-1.421 |
| | | | | | | | | | <55h/w- <60h/w | RH | 0.810 | 0.450-1.459 |
| | | | | | | | | | 60- <65h/w | RH | 1.070 | 0.586-1.955 |
| | | | | | | | | | 65- <70h/w | RH | 1.890 | 0.983-3.632 |
| | | | | | | | Physical disorder | | ≥70h/w | RH | 2.320 | 1.208-4.454 |
| | | | | | | | | | 50- <50h/w | PH | 1.410 | 0.821-2.422 |
| | | | | | | | | | <55h/w- <60h/w | PH | 1.090 | 0.541-2.195 |
| | | | | | | | | | 60- <65h/w | PH | 0.770 | 0.321-1.846 |
| | | | | | | | | | 65- <70h/w | PH | 1.850 | 0.832-4.112 |
| | | | | | | | | | ≥70h/w | PH | 2.430 | 1.103-5.354 |

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| | | | Female | | | | Unhealthy food habits | | | HB | 1.030 | 0.774-1.370 |
| | | | | | | | Physical inactivity | | | HB | 1.050 | 0.836-1.319 |
| | | | | | | | Heavy drink | | | HB | 0.980 | 0.706-1.361 |
| | | | | | | | Smoking | | | HB | 1.030 | 0.834-1.271 |
| | | | Male | | | | Obesity | | | PH | 1.080 | 0.854-1.366 |
| | Japan | 2213 | | | | | Physical inactivity | | | HB | 0.980 | 0.681-1.411 |
| | | | | | | | Heavy drink | | | HB | 0.830 | 0.584-1.179 |
| | | | | | | | Smoking | | | HB | 0.670 | 0.494-0.908 |
| | | | | | | | Obesity | | | PH | 0.860 | 0.611-1.211 |
| | | | Female | | | | Physical inactivity | | | HB | 0.950 | 0.490-1.841 |
| | | | | | | | Heavy drink | | | HB | 0.770 | 0.227-2.609 |
| | | | | | | | Smoking | | | HB | 1.470 | 0.341-6.343 |
| | | | | | | | Obesity | | | PH | 0.640 | 0.350-1.170 |

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| Artazcoz (2009) ^a [14] | Spain | 7085 (M: 3950; F:3135) | Male | Cross-sectional study | SR | Yes | Poor self-perceived health status | 30-40h/w | 41-50h/w | NH | 0.960 | 0.747-1.234 |
| | | | | | | | | | 51-60h/w | NH | 1.430 | 0.977-2.093 |
| | | | | | | | Poor mental health status | | 41-50h/w | MH | 1.240 | 0.905-1.700 |
| | | | | | | | | | 51-60h/w | MH | 2.060 | 1.310-3.240 |
| | | | | | | | Hypertension | | 41-50h/w | PH | 1.190 | 0.947-1.495 |
| | | | | | | | | | 51-60h/w | PH | 1.600 | 1.119-2.288 |
| | | | | | | | Smoking | | 41-50h/w | HB | 1.110 | 0.953-1.293 |
| | | | | | | | | | 51-60h/w | HB | 1.330 | 1.029-1.719 |
| | | | | | | | Physical inactivity | | 41-50h/w | HB | 1.730 | 1.314-2.277 |
| | | | | | | | | | 51-60h/w | HB | 2.430 | 1.640-3.600 |
| | | | | | | | Insufficient sleep | | 41-50h/w | RH | 1.300 | 1.111-1.521 |
| | | | | | | | | | 51-60h/w | RH | 1.420 | 1.090-1.850 |
| | | | Female | | | | Poor self-perceived health status | | 41-50h/w | NH | 1.020 | 0.749-1.389 |
| | | | | | | | | | 51-60h/w | NH | 1.380 | 0.743-2.562 |
| | | | | | | | Poor mental health status | | 41-50h/w | MH | 0.990 | 0.728-1.346 |
| | | | | | | | | | 51-60h/w | MH | 1.430 | 0.771-2.653 |
| | | | | | | | Hypertension | | 41-50h/w | PH | 0.660 | 0.426-1.021 |
| | | | | | | | | | 51-60h/w | PH | 1.060 | 0.458-2.451 |

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| | | | | | | | Smoking | | 41-50h/w | HB | 0.840 | 0.663-1.065 |
| | | | | | | | | | 51-60h/w | HB | 2.270 | 1.391-3.704 |
| | | | | | | | Physical inactivity | | 41-50h/w | HB | 1.380 | 0.961-1.982 |
| | | | | | | | | | 51-60h/w | HB | 1.530 | 0.690-3.391 |
| | | | | | | | Insufficient sleep | | 41-50h/w | RH | 1.000 | 0.781-1.281 |
| | | | | | | | | | 51-60h/w | RH | 2.210 | 1.343-3.637 |
| Pimenta (2009)* [15] | Spain | 8779 (M:3528; F:5251) | Male | Prospective cohort study (4.2 years) | SR | Yes | Hypertension | ≤39h/w | 40-49h/w | PH | 1.030 | 0.746-1.422 |
| | | | Female | | | | | | 50-60h/w | PH | 1.030 | 0.754-1.407 |
| | | | | | | | | | ≥60h/w | PH | 0.980 | 0.633-1.517 |
| | | | | | | | | | 40-50h/w | PH | 1.220 | 0.760-1.959 |
| | | | | | | | | | ≥50h/w | PH | 1.080 | 0.590-1.978 |
| Virtanen (2009) [16] | London, the UK | 2470 (M:1872; F:598) | Male and female | Prospective cohort study (3 years) | SR | Yes | Insufficient sleep (<7h/d) | 35-40h/w | 41-55h/w | RH | 1.550 | 1.031-2.331 |
| | | | | | | | | | >55h/w | RH | 2.800 | 1.200-6.532 |
| Driesen (2010)* [17] | Italy | 7217 | Male | Cross-sectional study | SR | No | Depressive symptoms | <45h/w | 45-50h/w | MH | 1.250 | 0.845-1.850 |
| | | | Female | | | | | | 51-60h/w | MH | 1.420 | 0.779-2.588 |
| | | | | | | | | | >60/w | MH | 2.360 | 0.752-7.408 |
| | | | | | | | | | >45h/w | MH | 1.180 | 0.440-3.162 |
| Holtermann (2010)* [18] | Copenhagen, Denmark | 4964 | Male | Prospective cohort study (30 years) | HME | No | Ischaemic heart disease | ≤40h/w | 45-49.5h/w | PH | 1.610 | 1.197-2.164 |
| | | | | | | | | | ≥50h/w | PH | 1.257 | 0.886-1.783 |
| | | | | | | | All-cause mortality | ≤40h/w | 45-49.5h/w | PH | 1.055 | 0.890-1.250 |
| | | | | | | | | | ≥50h/w | PH | 0.789 | 0.644-0.966 |
| Nash (2010)* [19] | Australia | 2953 (M:2085; F:868) | Male and female | Cross-sectional study | SR | Yes | Psychiatric morbidity | <40h/w | 40-49h/w | MH | 1.230 | 0.932-1.623 |
| | | | | | | | | | 50-59h/w | MH | 1.410 | 1.051-1.892 |
| | | | | | | | | | ≥60h/w | MH | 1.650 | 1.202-2.264 |
| | | | | | | | Hazardous alcohol use | <40h/w | 40-49h/w | HB | 1.130 | 0.809-1.578 |
| | | | | | | | | | 50-59h/w | HB | 1.150 | 0.818-1.616 |
| | | | | | | | | | ≥60h/w | HB | 0.670 | 0.452-0.994 |
| Netterstrøm (2010)* [20] | Copenhagen, Denmark | 1146 (M:551; F:595) | Male | Prospective cohort study (14 years) | HME | Yes | Ischaemic heart disease | <50h/w | >50h/w | PH | 0.700 | 0.191-2.572 |
| | | | Female | | | | | | <50h/w | PH | 0.800 | 0.091-7.065 |
| Virtanen (2010) [21] | The UK | 6014 (M:4262; F:1752) | Male and female | Prospective cohort study (11 years) | SR | Yes | Coronary heart disease | 7-8 h/d | 9h/d | PH | 0.951 | 0.716-1.262 |
| | | | | | | | | | 10h/d | PH | 1.167 | 0.865-1.576 |
| | | | | | | | | | 11-12h/d | PH | 1.462 | 1.060-2.018 |

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| Kivimäki (2011) [22] | London, the UK | 7095 (M:4986; F:2109) | Male and female | Prospective cohort study (12.3 years) | HME | No | Coronary heart disease | <11h/d | ≥11h/d | PH | 1.670 | 1.097-2.543 |
| Nakashima (2011) ^a [23] | Japan | 1510 | Male | Cross-sectional study | SR | Yes | Poor sleep quality | <46.5h/w | ≥46.5- <50h/w | RH | 0.900 | 0.600-1.350 |
| | | | | | | | | | ≥50- <52.5h/w | RH | 1.220 | 0.826-1.802 |
| | | | | | | | | | ≥52.5- <57.75h/w | RH | 1.380 | 0.937-2.033 |
| | | | | | | | | | ≥57.75h/w | RH | 1.380 | 0.929-2.049 |
| | | | | | | | | Short sleep duration | ≥46.5- <50h/w | RH | 1.430 | 1.024-1.997 |
| | | | | | | | | | ≥50- <52.5h/w | RH | 1.510 | 1.080-2.111 |
| | | | | | | | | | ≥52.5- <57.75h/w | RH | 1.750 | 1.250-2.450 |
| | ≥57.75h/w | RH | 3.680 | 2.587-5.234 | | | | | | | | |
| Virtanen (2011) ^a [24] | The UK | 2960 (M:2248; F:712) | Male | Prospective cohort study (5 years) | SR | Yes | Depression | ≤40h/w | 41-55h/w | MH | 0.844 | 0.618-1.152 |
| | | | | | | | | | >55h/w | MH | 1.035 | 0.624-1.719 |
| | | | | | | | | | 41-55h/w | MH | 0.947 | 0.704-1.275 |
| | | | | | | | >55h/w | MH | 1.228 | 0.769-1.962 | | |
| | | | Female | | | | Depression | 41-55h/w | MH | 1.855 | 1.117-3.082 | |
| | | | | | | | | >55h/w | MH | 1.874 | 0.770-4.559 | |
| | | | | | | | | 41-55h/w | MH | 1.316 | 0.819-2.113 | |
| >55h/w | MH | 2.093 | | 0.967-4.533 | | | | | | | | |
| Kobayashi (2012) ^a [25] | Japan | 911 | Male | Cross-sectional study | HME | Yes | Metabolic syndrome | ≤7 to 8 h/d | >8-9h/d | PH | 1.660 | 0.913-3.019 |
| | | | | | | | | | >9-10h/d | PH | 1.480 | 0.753-2.910 |
| | | | | | | | | | >10h/d | PH | 2.320 | 1.042-5.168 |
| Schluter (2012) ^a [26] | Australia and New Zealand | 4419 (M:3552; F:867) | Male and female | Cross-sectional study | SR | Yes | Alcohol use | <40h/w | 40-49h/w | HB | 1.260 | 1.006-1.579 |
| | | | | | | | | | ≥50h/w | HB | 1.460 | 1.020-2.090 |
| Virtanen (2012) ^a [27] | London, the UK | 2123 (M:1626; F:497) | Male and female | Prospective Cohort Study (5 years) | SR | Yes | Depressive symptoms | 7-8h/d | 9h/d | MH | 0.620 | 0.279-1.376 |
| | | | | | | | | | 10h/d | MH | 1.180 | 0.557-2.498 |
| | | | | | | | | | 11-12/d | MH | 2.300 | 1.048-5.049 |
| Wirtz (2012) ^a [28] | The US | 96915 (M: 48816; F:48099) | Male and Female | Cross-sectional study | HME | Yes | Injury | 31-40h/w | 41/50h/w | RH | 1.210 | 0.923-1.586 |
| | | | | | | | | | >50h/w | RH | 1.120 | 0.799-1.569 |
| | | | | | | | | | 41/50h/w | RH | 1.510 | 1.031-2.212 |

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| | | | | | | | | | >50h/w | RH | 1.690 | 1.059-2.697 |
| Jang (2013) ^a [29] | Korea | 8889 (M:5241; F:3648) | Male | Cross-sectional study | HME | Yes | Obesity | 40-48h/w | 49-60h/w | PH | 1.115 | 0.856-1.452 |
| | | | | | | | | | >60h/w | PH | 1.647 | 1.262-2.150 |
| | | | Female | | | | | | 49-60h/w | PH | 0.878 | 0.650-1.186 |
| | | | | | | | | | >60h/w | PH | 1.059 | 0.699-1.604 |
| | | | | | | | | | 49-60h/w | PH | 0.961 | 0.687-1.345 |
| | | | | | | | | | >60h/w | PH | 0.863 | 0.624-1.194 |
| | | | | | | | | | 49-60h/w | PH | 1.340 | 0.781-2.299 |
| | | | | | | | | | >60h/w | PH | 0.916 | 0.363-2.310 |
| Jeong (2013) ^a [30] | Korea | 1117 (M:926; F:121) | Male and female | Case-control study | HME | Yes | Cardiovascular heart disease | 40-48h/w | 48.1-52h/w | PH | 1.730 | 1.031-2.903 |
| | | | | | | | | | >52h/w | PH | 3.460 | 2.380-5.030 |
| Lee (2013) ^a [31] | Korea | 561 (M:417; F:144) | Male and female | Cross-sectional study | SR | No | Low mood | 35-47h/w | 48-52h/w | MH | 0.820 | 0.530-1.260 |
| | | | | | | | | | 53-60h/w | | 1.260 | 0.780-2.050 |
| | | | | | | | Depression | | ≥60h/w | | 1.030 | 0.410-2.580 |
| | | | | | | | | | 48-52h/w | MH | 1.36 | 0.820-2.260 |
| | | | | | | | | | 53-60h/w | | 2.94 | 1.540-5.590 |
| | | | | | | | | | ≥60h/w | | 4.35 | 2.180-8.67 |
| Ohtsu (2013) ^a [32] | Japan | 662 (M:372; F:290) | Male | Cross-sectional study | SR | No | Short sleep (<6h/d) | 7-<9h/d | ≥9-<11h/d | RH | 2.760 | 1.569-4.856 |
| | | | Female | | | | | | ≥11h/d | RH | 8.620 | 3.940-18.859 |
| | | | | | | | | | ≥9-<11h/d | RH | 2.510 | 1.169-5.387 |
| O' Reilly (2013) ^a [33] | North Ireland, the UK | 414949 (M:270011; F:144938) | Male | Prospective Cohort Study (8.7 years) | HME | Yes | All-cause mortality | 35-40h/w | 41-48h/w | PH | 0.960 | 0.879-1.049 |
| | | | | | | | | | 49-54h/w | PH | 1.020 | 0.920-1.130 |
| | | | Female | | | | | | ≥55h/w | PH | 0.970 | 0.880-1.070 |
| | | | | | | | | | 41-48h/w | PH | 0.980 | 0.797-1.205 |
| | | | | | | | | | 49-54h/w | PH | 1.170 | 0.871-1.572 |
| | | | | | | | | | ≥55h/w | PH | 0.860 | 0.631-1.172 |
| Cheng (2014) ^a [34] | Taiwan, China | 966 | Male | Case-control study | HME | No | Acute myocardial infarction | 40-48h/w | >48-60h/w | PH | 1.600 | 1.012-2.530 |
| | | | | | | | | | >60h/w | PH | 2.400 | 1.470-3.919 |
| | | | | | | | | | >48-60h/w | PH | 1.600 | 1.209-2.117 |
| | | | | | | | | | >60h/w | PH | 2.300 | 1.703-3.106 |
| Tayama (2014) ^a [35] | China and Japan | 2228 (M:1426; F:802) | Male | Cross-sectional study | HME | Yes | Diabetes | <45 h/w | 45-54h/w | PH | 1.130 | 0.736-1.735 |
| | | | Female | | | | | | ≥55h/w | PH | 2.200 | 1.391-3.479 |
| | | | | | | | | | 45-54h/w | PH | - | - |
| | | | | | | | | | ≥55h/w | PH | - | - |

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| Bannai (2015) ^a [36] | Japan | 515 (M:335; F:180) | Male | Cross-sectional study | SR | Yes | Sleep problem | ≤40h/w | >40-≤50h/w | RH | 1.140 | 0.470-2.768 |
| | | | Female | | | | | | >50-≤60h/w | RH | 1.200 | 0.547-2.634 |
| | | | | | | | | | >60h/w | RH | 2.050 | 0.994-4.230 |
| | | | | | | | | | >40-≤50h/w | RH | 0.640 | 0.169-2.430 |
| | | | | | | | | | >50-≤60h/w | RH | 0.650 | 0.187-2.262 |
| | | | >60h/w | | | | | | RH | 1.260 | 0.365-4.345 | |
| Cho (2015) ^a [37] | Korea | 1578 (M:1072; F:506) | Male | Prospective cohort study (7 years) | SR | Yes | Poor self-rated health | 36-40h/w | 41-52h/w | NH | 0.890 | 0.745-1.063 |
| | | | Female | | | | | | 52-68h/w | NH | 0.930 | 0.754-1.147 |
| | | | | | | | | | ≥69h/w | NH | 1.020 | 0.787-1.322 |
| | | | | | | | | | 41-52h/w | NH | 1.000 | 0.767-1.304 |
| | | | | | | | | | 52-68h/w | NH | 1.170 | 0.853-1.605 |
| | | | ≥69h/w | | | | | | NH | 1.630 | 1.050-2.530 | |
| Hino (2015) [38] | Japan | 1198 (M:457; F:741) | Male and female | Cross-sectional study | SR | Yes | Psychological distress | ≤55h/w | >45-79h/w | MH | 1.260 | 0.800-1.980 |
| | | | >80h/w | | | | | | MH | 1.380 | 0.730-2.600 | |
| | | | | | | | | | | | | |
| Kim (2015) ^a [39] | Korea | 34783 (M: 20543; F: 14240) | Male | Cross-sectional study | SR | Yes | Sleep disturbance | ≥40- <48h/w | ≥49-≤60h/w | RH | 2.389 | 1.807-3.158 |
| | | | Female | | | | | | >60h/w | RH | 3.017 | 1.956-4.653 |
| | | | | | | | | | ≥49-≤60h/w | RH | 1.041 | 0.766-1.415 |
| | | | | | | | | | >60h/w | RH | 1.418 | 1.003-2.005 |
| | | | | | | | | | ≥49-≤60h/w | RH | 1.525 | 1.034-2.249 |
| | | | | | | | | | >60h/w | RH | 0.994 | 0.398-2.484 |
| | | | | | | | | | ≥49-≤60h/w | RH | 0.826 | 0.540-1.263 |
| | | | | | | | | | >60h/w | RH | 1.241 | 0.721-2.136 |
| | | | | | | | | | | | | |
| | | | Kim (2016) ^a [40] | | | | | | South Korea | 6805 (M:4319; F:2486) | Male and female | Cross-sectional study |
| 53-68h/w | MH | 1.000 | | 0.743-1.346 | | | | | | | | |
| >68h/w | MH | 1.570 | | 1.052-2.344 | | | | | | | | |
| Yoon (2016) ^a [41] | Korea | 42234 | Female | Cross-sectional study | HME | Yes | Obesity | <40h/w | 50-54h/w | PH | 1.080 | 0.859-1.358 |
| | | | 55-59h/w | | | | | | PH | 1.020 | 0.724-1.437 | |
| | | | ≥60h/w | | | | | | PH | 1.280 | 1.042-1.573 | |

| | | | | | | | | | | | | |
|---------------------------------|-------------|--------------------------------|-----------------|-----------------------|----|-----|------------------------------|-----------|---------------|----|-------|--------------|
| | | | Female | | | | | | 50-54h/w | PH | 0.990 | 0.869-1.128 |
| | | | | | | | | | 55-59h/w | PH | 1.110 | 0.966-1.275 |
| | | | | | | | | | ≥60h/w | PH | 1.080 | 0.859-1.358 |
| Lee (2017) ^a [42] | South Korea | 1030 | Male | Cross-sectional study | SR | Yes | Psychological stress | 40-44 h/w | 45-49h/w | MH | 0.940 | 0.520-1.700 |
| | | | | | | | | | 50-54h/w | MH | 0.990 | 0.533-1.840 |
| | | | | | | | | | 55-59h/w | MH | 1.330 | 0.666-2.655 |
| | | | | | | | | | ≥60 h/w | MH | 3.000 | 1.381-6.516 |
| Ma (2017) ^a [43] | China | 595 (M:406; F:189) | Male and female | Case-control study | SR | No | Cardiovascular heart disease | Not given | 35-40h/w | PH | 0.977 | 0.544-1.754 |
| | | | | | | | | | 41-48h/w | PH | 1.439 | 0.759-2.729 |
| | | | | | | | | | 49-54h/w | PH | 1.383 | 0.669-2.858 |
| | | | | | | | | | ≥55h/w | PH | 2.213 | 1.125-4.354 |
| Nakata (2017) [44] | Japan | 2375 (M:1739; F:636) | Male and female | Cross-sectional study | SR | Yes | Depressive symptoms | 6-8h/d | >8-10h/d | MH | 1.120 | 0.893-1.405 |
| | | | | | | | | | >10h/d | MH | 1.490 | 1.069-2.077 |
| Cho (2018) ^a [45] | Korea | 32867 (M:20200; F:12667) | Male and female | Cross-sectional study | SR | Yes | Poor self-rated health | ≤52h/w | >52h/w | NH | 1.300 | 1.220-1.400 |
| Ogawa (2018) ^a [46] | Japan | 973 (M:812; F:161) | Male and female | Cross-sectional study | SR | Yes | Depressive symptoms | <60h/w | 60- <80h/w | MH | 1.900 | 0.911-3.962 |
| | | | | | | | | | 80- 100h/w | MH | 2.830 | 1.361-5.884 |
| | | | | | | | | | ≥100h/w | MH | 6.960 | 3.048-15.891 |

Note. ^a: The study was included in the moderator analysis for gender

OR = odds ratio; PH = physiological health; MH = mental health; HB = health behaviours; RH = related health; NH = non-specified health; M = male; F = female; CI = confidence interval; N/A = not applicable; h = hours; w = week; d = day; SR = self-report; HME = health or medical examination

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