**Supplementary Table 1.** Search Strategy and Search Results

Database: PubMed

Search date: 05/15/2023

|  | Group | Keyword | Results |
| --- | --- | --- | --- |
| 1 | sleep | "Sleep"[MeSH Terms] OR "sleep duration"[Text Word] OR "sleep quality"[Text Word] OR "insomnia"[Text Word] OR "sleep disorder"[Text Word] OR "sleep disorders"[Text Word] OR "sleep problem"[Text Word] OR "sleep problems"[Text Word] OR "sleep deprivation"[Text Word] OR "sleep insufficiency"[Text Word] OR "sleep habit"[Text Word] OR "sleep habits"[Text Word] OR "sleepiness"[Text Word] OR "sleep latency"[Text Word] OR "sleep maintenance"[Text Word] OR "sleep disturbance"[Text Word] OR "sleep disturbances"[Text Word] | [165,713](https://pubmed.ncbi.nlm.nih.gov/?term=%28%28%28%28%28%28%28%28%28%28%28%28%28%28%28%28%22Sleep%22%5BMesh%5D%29+OR+%28%22sleep+duration%22%5BText+Word%5D%29%29+OR+%28%22sleep+quality%22%5BText+Word%5D%29%29+OR+%28%22insomnia%22%5BText+Word%5D%29%29+OR+%28%22sleep+disorder%22%5BText+Word%5D%29%29+OR+%28%22sleep+disorders%22%5BText+Word%5D%29%29+OR+%28%22sleep+problem%22%5BText+Word%5D%29%29+OR+%28%22sleep+problems%22%5BText+Word%5D%29%29+OR+%28%22sleep+deprivation%22%5BText+Word%5D%29%29+OR+%28%22sleep+insufficiency%22%5BText+Word%5D%29%29+OR+%28%22sleep+habit%22%5BText+Word%5D%29%29+OR+%28%22sleep+habits%22%5BText+Word%5D%29%29+OR+%28%22sleepiness%22%5BText+Word%5D%29%29+OR+%28%22sleep+latency%22%5BText+Word%5D%29%29+OR+%28%22sleep+maintenance%22%5BText+Word%5D%29%29+OR+%28%22sleep+disturbance%22%5BText+Word%5D%29%29+OR+%28%22sleep+disturbances%22%5BText+Word%5D%29&sort=) |
| 2 | nurse | "Nurses"[MeSH Terms] OR "nurse"[Text Word] OR "Nurses"[Text Word] | [352,908](https://pubmed.ncbi.nlm.nih.gov/?term=%28%28%22Nurses%22%5BMesh%5D%29+OR+%28%22nurse%22%5BText+Word%5D%29%29+OR+%28%22nurses%22%5BText+Word%5D%29&sort=) |
| 3 | intervention | ("intervention"[Text Word] OR "interventions"[Text Word] OR "treatment"[Text Word] OR "treatments"[Text Word] OR "therapy"[Text Word] OR "therapies"[Text Word] OR "program"[Text Word] OR "programs"[Text Word] OR "strategy"[Text Word] OR "strategies"[Text Word] OR "training"[Text Word] OR "trainings"[Text Word])  AND  ("RCT"[Text Word] OR "RCTs"[Text Word] OR "clinical trial"[Text Word] OR "clinical trials"[Text Word] OR "randomized controlled trial"[Text Word] OR "randomized controlled trials"[Text Word] OR "experimental"[Text Word] OR "experiment"[Text Word] OR "experiments"[Text Word] OR "quasi-experimental"[Text Word] OR "quasi-experimental"[Text Word]) | [11,403,537](https://pubmed.ncbi.nlm.nih.gov/?term=%28%28%28%28%28%28%28%28%28%28%28%22intervention%22%5BText+Word%5D%29+OR+%28%22interventions%22%5BText+Word%5D%29%29+OR+%28%22treatment%22%5BText+Word%5D%29%29+OR+%28%22treatments%22%5BText+Word%5D%29%29+OR+%28%22therapy%22%5BText+Word%5D%29%29+OR+%28%22therapies%22%5BText+Word%5D%29%29+OR+%28%22program%22%5BText+Word%5D%29%29+OR+%28%22programs%22%5BText+Word%5D%29%29+OR+%28%22strategy%22%5BText+Word%5D%29%29+OR+%28%22strategies%22%5BText+Word%5D%29%29+OR+%28%22training%22%5BText+Word%5D%29%29+OR+%28%22trainings%22%5BText+Word%5D%29&sort=)  [4,088,172](https://pubmed.ncbi.nlm.nih.gov/?term=%28%28%28%28%28%28%28%28%28%28%22RCT%22%5BText+Word%5D%29+OR+%28%22RCTs%22%5BText+Word%5D%29%29+OR+%28%22clinical+trial%22%5BText+Word%5D%29%29+OR+%28%22clinical+trials%22%5BText+Word%5D%29%29+OR+%28%22randomized+controlled+trial%22%5BText+Word%5D%29%29+OR+%28%22randomized+controlled+trials%22%5BText+Word%5D%29%29+OR+%28%22experimental%22%5BText+Word%5D%29%29+OR+%28%22experiment%22%5BText+Word%5D%29%29+OR+%28%22experiments%22%5BText+Word%5D%29%29+OR+%28%22quasi-experimental%22%5BText+Word%5D%29%29+OR+%28%22quasi+experimental%22%5BText+Word%5D%29&sort=)  [1,937,341](https://pubmed.ncbi.nlm.nih.gov/?term=%28%28%28%28%28%28%28%28%28%28%28%28%22intervention%22%5BText+Word%5D%29+OR+%28%22interventions%22%5BText+Word%5D%29%29+OR+%28%22treatment%22%5BText+Word%5D%29%29+OR+%28%22treatments%22%5BText+Word%5D%29%29+OR+%28%22therapy%22%5BText+Word%5D%29%29+OR+%28%22therapies%22%5BText+Word%5D%29%29+OR+%28%22program%22%5BText+Word%5D%29%29+OR+%28%22programs%22%5BText+Word%5D%29%29+OR+%28%22strategy%22%5BText+Word%5D%29%29+OR+%28%22strategies%22%5BText+Word%5D%29%29+OR+%28%22training%22%5BText+Word%5D%29%29+OR+%28%22trainings%22%5BText+Word%5D%29%29+AND+%28%28%28%28%28%28%28%28%28%28%28%22RCT%22%5BText+Word%5D%29+OR+%28%22RCTs%22%5BText+Word%5D%29%29+OR+%28%22clinical+trial%22%5BText+Word%5D%29%29+OR+%28%22clinical+trials%22%5BText+Word%5D%29%29+OR+%28%22randomized+controlled+trial%22%5BText+Word%5D%29%29+OR+%28%22randomized+controlled+trials%22%5BText+Word%5D%29%29+OR+%28%22experimental%22%5BText+Word%5D%29%29+OR+%28%22experiment%22%5BText+Word%5D%29%29+OR+%28%22experiments%22%5BText+Word%5D%29%29+OR+%28%22quasi-experimental%22%5BText+Word%5D%29%29+OR+%28%22quasi+experimental%22%5BText+Word%5D%29%29&sort=) |
|  | 1+2+3 |  | [347](https://pubmed.ncbi.nlm.nih.gov/?term=longquery72d5898c1c42e1576fae&sort=) |

*Note. 1+2+3 included all studies covering “keywords in group 1 (sleep)” AND “keywords in group 2 (nurse)” AND “keywords in group 3 (intervention)”*

Database: CINAHL

Search date: 05/15/2023

|  | Group | Keyword | Results |
| --- | --- | --- | --- |
| 1 | sleep | "MH Sleep" OR "sleep duration" OR "sleep quality" OR "insomnia" OR "sleep disorder" OR "sleep disorders" OR "sleep problem" OR "sleep problems" OR "sleep deprivation" OR "sleep insufficiency" OR "sleep habit" OR "sleep habits" OR "sleepiness" OR "sleep latency" OR "sleep maintenance" OR "sleep disturbance" OR "sleep disturbances" | 49,574 |
| 2 | nurse | "Nurses" OR "nurse" | 553,068 |
| 3 | intervention | ("intervention" OR "interventions" OR "treatment" OR "treatments" OR "therapy" OR "therapies" OR "program" OR "programs" OR "strategy" OR "strategies" OR "training" OR "trainings")  AND  ("RCT" OR "RCTs" OR "clinical trial" OR "clinical trials" OR "randomized controlled trial" OR "randomized controlled trials" OR "experimental" OR "experiment" OR "experiments" OR "quasi-experimental" OR "quasi-experimental") | 3,172,533595,591 423,908 |
|  | 1+2+3 |  | 285 |

Database: Academia Search Ultimate

Search date: 05/15/2023

|  | Group | Keyword | Results |
| --- | --- | --- | --- |
| 1 | sleep | DE "SLEEP" OR "sleep duration" OR "sleep quality" OR "insomnia" OR "sleep disorder" OR "sleep disorders" OR "sleep problem" OR "sleep problems" OR "sleep deprivation" OR "sleep insufficiency" OR "sleep habit" OR "sleep habits" OR "sleepiness" OR "sleep latency" OR "sleep maintenance" OR "sleep disturbance" OR "sleep disturbances" | 91,192 |
| 2 | nurse | "Nurses" OR "nurse" | 278,513 |
| 3 | intervention | ("intervention" OR "interventions" OR "treatment" OR "treatments" OR "therapy" OR "therapies" OR "program" OR "programs" OR "strategy" OR "strategies" OR "training" OR "trainings")  AND  ("RCT" OR "RCTs" OR "clinical trial" OR "clinical trials" OR "randomized controlled trial" OR "randomized controlled trials" OR "experimental" OR "experiment" OR "experiments" OR "quasi-experimental" OR "quasi-experimental") | 8,657,266  3,594,477  1,115,797 |
|  | 1+2+3 |  | 227 |

Database: PsycINFO

Search date: 05/15/2023

|  | Group | Keyword | Results |
| --- | --- | --- | --- |
| 1 | sleep | DE "Sleep" OR DE "Sleep Deprivation" OR DE "Sleep Quality" OR ‘Sleep’.mp. or ‘sleep duration’.mp. or ‘sleep quality’.mp. or ‘insomnia’.mp. or ‘sleep disorder’.mp. or ‘sleep disorders’.mp. or ‘sleep problem’.mp. or ‘sleep problems’.mp. or ‘sleep deprivation’.mp. or ‘sleep insufficiency’.mp. or ‘sleep habit’.mp. or ‘sleep habits’.mp. or ‘sleepiness’.mp. or ‘sleep latency’.mp. or ‘sleep maintenance’.mp. or ‘sleep disturbance’.mp. or ‘sleep disturbances’ | 45,651 |
| 2 | nurse | DE "Nurses" OR ‘Nurses’.mp. or ‘nurse’ | 82,254 |
| 3 | intervention | (DE "Intervention" OR DE "Treatment" OR DE "Training" OR ‘intervention’.mp. or ‘interventions’.mp. or ‘treatment’.mp. or ‘treatments’.mp. or ‘therapy’.mp. or ‘therapies’.mp. or ‘program’.mp. or ‘programs’.mp. or ‘strategy’.mp. or ‘strategies’.mp. or ‘training’.mp. or ‘trainings’)  AND  (DE "Clinical Trials" OR DE "Experimental Design" OR DE "Randomized Controlled Trials" OR ‘RCT’.mp. or ‘RCTs’.mp. or ‘clinical trial’.mp. or ‘clinical trials’.mp. or ‘randomized controlled trial’.mp. or ‘randomized controlled trials’.mp. or ‘experimental’.mp. or ‘experiment’.mp. or ‘experiments’.mp. or ‘quasi-experimental’.mp. or ‘quasi-experimental’) | 574,99939,799 7,961 |
|  | 1+2+3 |  | 5 |