

Supplementary Table 1 Depression of included studies.

Authors, year (country)	Epidemic/pandemic	Participants	Design	Main results on psychological outcomes	Main results on psychological disorder	Time of measurement
Lai et al, 2020 (China)	COVID-19	1257 HCWs	cross-sectional study	The prevalence of symptoms of depression, anxiety, insomnia, and distress was evaluated by the Chinese versions of the 9-item Patient Health Questionnaire, the 7-item Generalized Anxiety Disorder scale, the 7-item Insomnia Severity Index, and the 22-item Impact of Event Scale–Revised.	A considerable proportion of participants had symptoms of depression (50.4%), anxiety (44.6%), insomnia (34.0%), and distress (71.5%).	During the COVID-19 outbreak
Shi et al, 2020 (China)	COVID-19	56932 submitted the questionnaires,	cross-sectional study	The degree of symptoms of depression, anxiety, insomnia, and stress was evaluated by the Patient Health Questionnaire–9, Generalized Anxiety Disorder–7, Insomnia Severity Index, and Acute Stress Disorder Scale.	The rates of mental health symptoms among the survey respondents were 27.9% for depression, 31.6% for anxiety, 29.2% for insomnia, and 24.4% for stress.	During the COVID-19 outbreak
Xie et al, 2020 (China)	COVID-19	1784 participants completed the survey	RESEARCH LETTER	Depressive and anxiety symptoms measured by the CDI-S and the Screen for Child Anxiety Related Emotional Disorders, respectively.	A total of 403 students (22.6%) and 337 students (18.9%) reported depressive and anxiety symptoms.	During the COVID-19 outbreak
Shen et al, 2020 (China)	COVID-19	Phase I, 317 patients	cross-sectional study	Depression and anxiety.	6.46% staffs suffered depression, 9.87% had anxiety, and 98% were satisfied with the infection control policy.	During the COVID-19 outbreak

Zhou et al, 2020 (China)	COVID-19	A total of 8079 participants	cross-sectional study	Demographic data, assess students' awareness of COVID-19, and assess depressive and anxiety symptoms with the PHQ-9 and the GAD-7 questionnaire, respectively.	The prevalence of depressive symptoms, anxiety symptoms, and a combination of depressive and anxiety symptoms was 43.7%, 37.4%, and 31.3%.	During the COVID-19 outbreak
Wu et al, 2020 (China)	COVID-19	A total of 4124 pregnant women	Multi-center cross-sectional study	The internationally recommended EPDS was used to assess maternal depression and anxiety symptoms.	Pregnant women assessed after the declaration had higher rates of depressive symptoms (26.0% vs 29.6%) than women assess pre-epidemic announcement.	During the COVID-19 outbreak
Zhao et al, 2020 (China)	COVID-19	7,236 self-selected volunteers	cross-sectional survey	Generalized anxiety disorder (GAD), depressive symptoms, sleep quality.	The overall prevalence of GAD, depressive symptoms, sleep quality were 35.1%, 20.1%, 18.2%, respectively.	During the COVID-19 outbreak
Chew et al, 2020 (Singapore and India)	COVID-19	906 healthcare workers	cross-sectional study	The prevalence of physical symptoms displayed by healthcare workers and the associations between physical symptoms and psychological outcomes of depression, anxiety, stress, and PTSD were evaluated.	5.3% screened positive for moderate to depression, 8.7% for anxiety, 2.2% for stress, and 3.8% for psychological distress.	During the COVID-19 outbreak
Sanguino et al, 2020 (Spain)	COVID-19	The sample (n=3480)	cross-sectional study	The presence of depression, anxiety and PTSD was evaluated.	The 18.7% of the sample revealed depressive, 21.6% anxiety and 15.8% PTSD symptoms.	During the Initial Stage of the COVID-19
Song et al, 2020 (China)	COVID-19	A total of 14,825 doctors and nurses	cross-sectional study	Demographic data and mental health measurements were collected by electronic questionnaires.	The prevalence rates of depressive symptoms and PTSD were 25.2% and 9.1%, respectively.	During the COVID-19 outbreak

Shechter et al, 2020 (New York)	COVID-19	n=657 completed all survey questions.	cross-sectional study	A brief psychological screen, assessment of distress due to COVID-19-specific stressors, meaning/purpose, coping behaviors, and wellness resources was desired.	57% for acute stress, 48% for depressive, and 33% for anxiety symptoms.	During the COVID-19 outbreak
Tang et al, 2020 (China)	COVID-19	2485 participants	cross-sectional study	The PTSD and depression prevalence.	PTSD and depression prevalence were found to be 2.7% and 9.0%.	After the outbreak of the COVID-19 epidemic
Cao et al, 2020 (China)	COVID-19	7143 college students	cross-sectional study	The GAD-7 and those inquiring the participants' basic information.	Results indicated that 0.9% of the respondents were experiencing severe anxiety, 2.7% moderate anxiety, and 21.3% mild anxiety.	During the COVID-19 outbreak
Lu et al, 2020 (China)	COVID-19	A total of 2299 eligible participants	single-center, cross-sectional survey	Occurrence of fear, anxiety and depression were measured by the numeric rating scale (NRS) on fear, Hamilton Anxiety Scale (HAMA), and Hamilton Depression Scale (HAMD), respectively.	22.6% of medical staff showed mild to moderate anxiety the corresponding proportions of administrative staff were 17.1% and 2.9%. 11.8% of the medical staff presented with mild to moderate depression.	During the COVID-19 outbreak
Voitsidis et al, 2020 (Greek)	COVID-19	2,427 individuals participated	cross-sectional study	The three-day online survey included questions about sociodemographic characteristics, contact with COVID-19 and COVID-19-related negative attitudes, as well as the AIS, the IUS, the JGLS and the PHQ-2 Depression Scale.	Sleep problems were detected in 37.6% of the participants.	During the COVID-19 outbreak

González et al, 2020 (Spanish)	COVID-19	2530 members of the University of Valladolid, in Spain.	cross-sectional study	The DASS-21 was employed to assess symptoms of depression, anxiety and stress.	Moderate to extremely severe scores of anxiety, depression, and stress were reported by 21.34%, 34.19% and 28.14% of the respondents, respectively.	During the COVID-19 outbreak
Kaparounaki et al, 2020 (Greece)	COVID-19	The first 1000 university students,	cross-sectional study	Data were collected anonymously through an online questionnaire which included the STAI, the CES-D the RASS and questions to assess beliefs in conspiracy theories including those pertaining to COVID-19, as well as sexuality, sleep and quality of life.	There was a 'horizontal' increase in scores; 42.5% for anxiety, 74.3% for depression, and 63.3% increase in total suicidal thoughts.	During the COVID-19 outbreak
Elbay et al, 2020 (Istanbul)	COVID-19	442 healthcare workers and related factors	cross-sectional survey	Depression Anxiety and Stress Scale-21 (DAS-21).	286 (64.7%) had symptoms of depression, 224 (51.6%) anxiety, and 182 (41.2%) stress.	During the COVID-19 outbreak
Lin et al, 2020 (China)	COVID-19	A sample of 5461 individuals in China	cross-sectional survey	The Insomnia Severity Index (ISI), PHQ-9, Generalized Anxiety Disorder Scale (GAD-7) and Acute Stress Disorder Scale (ASDS) were used.	A total of 24.46% participants were suspected of having depression. Additionally, 18.47% participants were suspected of having generalized anxiety disorder. A total of 15.8% of the participants had ASD according to the ASDS.	During the COVID-19 outbreak

Qi et al, 2020 (China)	COVID-19	A total of 1306 subjects (801 FMW and 505 non-FMW) were enrolled.	cross-sectional study	An online questionnaire, including PSQI, Athens Insomnia Scale (AIS) and Visual Analogue Scale (VAS), was used to evaluate sleep disturbances and mental status. Sleep disturbances were defined as PSQI>6 points or/and AIS>6 points.	Compared to non-FMW, FMW had significantly higher prevalence of sleep disturbances according to PSQI > 6 points (78.4% vs 61.0%) and AIS > 6 points (51.7% vs 35.6%).	During the COVID-19 outbreak
Apisarnthanarak et al, 2020 (Thailand)	COVID-19	A total of 160 HCP	Research Brief	Anxiety and Fear.	68 HCP (68/160; 42.5%) were categorized as having at least mild anxiety disorder.	During the COVID-19 outbreak
Liu et al, 2020 (China)	COVID-19	512 medical staff in China	cross-sectional study	SAS to assess anxiety, with the criteria of normal (≤ 49), mild (50-59), moderate (60-70) and severe anxiety (≥ 70). We used multivariable linear regression to determine the factors for anxiety.	The prevalence of anxiety was 12.5%, with 53 workers suffering from mild (10.35%), seven workers suffering from moderate (1.36%) and four workers suffering from severe anxiety (0.78%).	During the COVID-19 outbreak
Zarghami et al, 2020 (Fasacity, America)	COVID-19	A total of 82 COVID-19 patients	cross-sectional study	PHQ-9, GAD-7, and PSS 14 questionnaires were administered for all patients.	Insomnia seen in 29.3% patients and adjustment disorder in 15.9% patients were the most common psychiatric disorders among a total of 40.2% patients suffering from mental illness.	During the COVID-19 outbreak
Almandoz et al, 2020 (America)	COVID-19	A total of 123 patients	cross-sectional study	Logistic regression models examined the impact of these orders on anxiety and depression by ethnic group.	14.6% reported symptoms. 72.8% reported increased anxiety and 83.6% increased depression since stay-at-home orders were initiated.	During the COVID-19 outbreak

Zhang et al, 2020 (China)	COVID-19	A total of 2,182 Chinese subjects participated.	cross-sectional study	Mental health variables were assessed via the ISI, the SCL-90-R, and the PHQ-4, which included a 2-item anxiety scale and a PHQ-2.	Compared with nonmedical health workers, medical health workers had a higher prevalence of insomnia (38.4 vs. 30.5%), anxiety (13.0 vs. 8.5%), depression (12.2 vs. 9.5%), somatization (1.6 vs. 0.4%), and obsessive-compulsive symptoms (5.3 vs. 2.2%).	During the COVID-19 outbreak
Liu et al, 2020 (China)	COVID-19	In total, 608 valid questionnaires were obtained.	cross-sectional study	The State-Trait Anxiety Inventory, Self-rating Depression Scale, and Symptom Checklist-90 to evaluate psychological status. We also investigated respondents' behavior changes.	More respondents had state anxiety than trait anxiety (15.8% vs 4.0%). Depression was found among 27.1% of respondents and 7.7% had psychological abnormalities. About 10.1% of respondents suffered from phobia.	During the COVID-19 outbreak
Gao et al, 2020 (China)	COVID-19	Total of 4872 participants	cross-sectional study	Besides demographics and SME, depression was assessed by The Chinese version of WHO-5 and anxiety was assessed by Chinese version of GAD-7.	The prevalence of depression, anxiety and CDA was 48.3%, 22.6% and 19.4%.	During the COVID-19 outbreak
Ping et al, 2020 (China)	COVID-19	10, 1500 questionnaire were returned by respondents.	cross-sectional study	The questionnaires included demographic and socioeconomic data, health status, the condition epidemic situation and EQ-5D scale.	The most frequently reported problem were pain/discomfort (19.0%) and anxiety/depression (17.6%).	During the COVID-19 outbreak
Ozamiz et al, 2020 (Spain)	COVID-19	A total of 1933 people	cross-sectional study	Sociodemographic and psychological data were gathered, assessing variables such as stress, anxiety, and depression.	The symptoms of depression (27.5%), anxiety (26.9%) and stress (26.5%).	During the COVID-19 outbreak

Zhu et al, 2020 (China)	COVID-19	A total of 79 doctors and 86 nurses	cross-sectional study	The self-rating anxiety scale (SAS), self-rating depression scale (SDS), and the simplified coping style questionnaire (SCSQ).	The prevalence rates of anxiety and depression symptoms among doctors was 11.4% and 45.6%, respectively.	During the COVID-19 outbreak
Liu et al, 2020 (China)	COVID-19	A total of 217 students	cross-sectional study	PHQ-9 and GAD-7, was utilized for the present study.	35.5% who participated in the survey were in a state of depression, and 22.1% were in a state of anxiety.	During the COVID-19 outbreak
Mazza et al, 2020 (Italy)	COVID-19	2766 participants	cross-sectional study	Multivariate ordinal logistic regression models were constructed to examine the associations between sociodemographic variables; personality traits; depression, anxiety, and stress.	High or Very High Depression 32.8%, Anxiety 18.7%, Stress 27.2%.	During the COVID-19 outbreak
Yang et al, 2020 (South Korea)	COVID-19	65 physical therapists	cross-sectional study	The questionnaires evaluated the presence of anxiety and depression in the respondents.	21 (32.3%) and 12 (18.5%) physical therapists reported having symptoms of anxiety and depression.	During the COVID-19 outbreak
Choi et al, 2020 (Hong Kong)	COVID-19	500 respondents included in the study	cross-sectional study	Respondents were randomly recruited and asked to complete a structured questionnaire, including the PHQ-9, the GAD-7, the global rating of change scale and items related to COVID-19.	19% had depression and 14% had anxiety.	During the COVID-19 outbreak
Forte et al, 2020 (Italy)	COVID-19	A total of 2286 respondents participated in the study.	cross-sectional study	A new self-report questionnaire (COVID-19-PTSD), consisting of 19 items, was developed starting from the PCL-5 questionnaire, and it was administered in	A high percentage of PTSD symptomatology (29.5%) was found in the Italian population.	During the COVID-19 outbreak

				order to analyze its psychometric properties.		
Li et al, 2020 (Taiwan, China)	COVID-19	1970 participants	cross-sectional study	Including level of worry, change in social interaction and daily lives, any academic/occupational interference, levels of social and specific support, and self-reported physical health.	In total, 55.8% of the participants reported sleep disturbance, and 10.8% reported having suicidal thoughts in the previous week.	During the COVID-19 outbreak
Forte et al, 2020 (Italy)	COVID-19	The study included 2291 respondents.	cross-sectional study	Psychopathological symptoms such as anxiety, mood alterations and post-traumatic symptomatology were assessed.	The results revealed that respectively 31.38%, 37.19% and 27.72% of respondents reported levels of anxiety, and PTSD symptoms.	During the COVID-19 outbreak
Buonsenso et al, 2020 (Sierra Leone)	COVID-19	78 householders replied.	survey	The change in income and ability to feed the family during lockdown, anxiety during lockdown.	All, except one, declared a (19.2%) to (79.4%) reduction of weekly income compared with the pre-lockdown period, declaring difficulties in providing food for the family members (82%), and anxiety (60%).	During the COVID-19 outbreak
Wang et al, 2020 (China)	COVID-19	1210 respondents from 194 cities in China.	cross-sectional study	Psychological impact was assessed by the IES-R, and mental health status was assessed by the DASS-21.	In total, 53.8% of respondents rated the psychological impact of the outbreak depressive symptoms; 28.8% reported anxiety symptoms.	During the COVID-19 outbreak
Liu et al, 2020 (U.S.)	COVID-19	898 participants	cross-sectional study	The levels of depression (PHQ-8 scores), anxiety scores (GAD-7 scores), and the	Respondents reported high levels of depression (43.3%), high anxiety scores	One month after the U.S. declared a state of

				levels of PTSD symptoms (PCL-C scores) were measured.	(45.4%), and high levels of PTSD symptoms (31.8%).	emergency due to COVID-19
Lei et al, 2020 (China)	COVID-19	1593 participants	cross-sectional study	Data were collected using the self-rating anxiety scale (SAS) and the self-rating depression scale (SDS).	The prevalence of anxiety and depression was approximately 8.3% and 14.6%, respectively.	During the COVID-19 outbreak
Wang et al, 2020 (China)	COVID-19	123 participants	cross-sectional study	The questionnaire consisted of three parts, including socio-demographic characteristics and COVID-19 epidemic-related factors, the PSQI, and SAS and SDS.	38% of pediatric HCWs were suffering from sleep disturbance, in addition, 7% and 25% of pediatric healthcare workers had anxiety and depression.	During the COVID-19 outbreak
Que et al, 2020 (China)	COVID-19	A total of 2285 HCWs	cross-sectional study	Psychological problems were assessed using the Generalized Anxiety Disorder Scale, Patient Health Questionnaire and Insomnia Severity Index.	The prevalence of symptoms of anxiety, depression, insomnia and the overall psychological problems was 46.04%, 44.37%, 28.75% and 56.59%, respectively.	During the COVID-19 outbreak
Ren et al, 2020 (China)	COVID-19	A total of 1172 subjects	cross-sectional study	The demographical data and self-assessment results of the following 8 common mental states: depression (PHQ-9), anxiety (GAD-7), somatization (SOM of SCL-90), stress (PSS-10), psychological resilience (CD-RISC-10), suicidal ideation and behavior (MINI suicidality module), insomnia (ISI), and stress disorder (ASDS & PCL-5).	The incidence of most mental disorders was as follows: 18.8% of depression, 13.3% of anxiety, 7.6% of mental health problems, 2.8% of high risk of suicidal and behavior, 7.2% of clinical insomnia, and 7.0% of clinical PTSD symptoms.	During the COVID-19 outbreak

Vaughan et al, 2020 (USA)	COVID-19	3604 responses received.	cross-sectional study	An anonymous 26-item online questionnaire to measure the anxiety and depressive disorder.	One-third of respondents had a prior diagnosis of an anxiety disorder, and 11% reported taking anxiolytic medications; over one-quarter had a prior diagnosis of a depressive disorder and 11% reported taking antidepressant medications.	During the COVID-19 outbreak
Zhu et al, 2020 (China)	COVID-19	922 participants	cross-sectional study	The psychological status was evaluated using the (SCL-90.	18.3% had psychological health problems.	During the COVID-19 outbreak
Wang et al, 2020 (China)	COVID-19	1738 respondents	longitudinal study	Psychological impact and mental health status were assessed by the Impact of Event Scale-Revised (IES-R) and the DASS-21, respectively.	Stress, anxiety and depression were noted in 8.1%, 28.8% and 16.5%, respectively.	The epidemic's peak four weeks later
Wang et al, 2020 (China)	COVID-19	44,447 college students	cross-sectional study	The SAS and the CES-D Scale were used to define the anxiety and depression symptom, respectively.	The prevalence of anxiety and depression symptom was 7.7% and 12.2%, respectively.	During the COVID-19 outbreak
Alkhamees et al, 2020 (Saudi Arabia)	COVID-19	1160 respondents of the general public	cross-sectional study	The outcomes were assessed using Patient Health Questionnaire-2 and Generalized Anxiety Disorder-2. Participants with sleep disturbances completed the Insomnia Severity Index.	23.6% psychological impact of the outbreak, 28.3%, 24%, and 22.3% reported depressive, anxiety, and stress symptoms, respectively.	During the COVID-19 outbreak
Gualano et al, 2020 (Italy)	COVID-19	The sample size was 1515	cross-sectional study	Questionnaires assessed socio-demographics characteristic, behaviors and healthcare access. The outcomes were assessed using Patient Health Questionnaire-2 and Generalized Anxiety	Depression and anxiety symptom prevalence was 24.7% and 23.2%; 42.2% had sleep disturbances and, among them, 17.4% reported moderate/severe insomnia.	During the COVID-19 outbreak

				Disorder-2. Participants with sleep disturbances completed the Insomnia Severity Index.		
Moreno et al, 2020 (Spain)	COVID-19	1422 health workers	cross-sectional study	Posttraumatic stress: The IES-R; Anxiety and depression: The Spanish adaptation of the HADS.	A total of 56.6% of HCWs present symptoms of posttraumatic stress disorder, 58.6% anxiety disorder, 46% depressive disorder and 41.1% feel emotionally drained.	During the COVID-19 outbreak
Xiao et al, 2020 (China)	COVID-19	933 students	cross-sectional study	Patient Generalized Anxiety Disorder-7 and Health Questionnaire-9 were used to measure anxiety disorders and depression.	Prevalence of anxiety disorder was 17.1% and depression was 25.3%.	During the COVID-19 outbreak
El-Zoghby et al, 2020 (Egypt)	COVID-19	510 Egyptian adults	cross-sectional study	Impact of Event Scale-Revised (IES-R) was used.	About 211 (41.4%) suffered a severe impact.	During the COVID-19 outbreak
Karasar et al, 2020(Turkey)	COVID-19	A total of 518 individuals	cross-sectional study	"Short Psychological Resilience Scale" and the "Beck Depression Scale" were used to collect data.	The prevalence of depression was 16.6%.	During the COVID-19 outbreak
Ran et al, 2020(China)	COVID-19	1770 Chinese citizens	cross-sectional study	The analyses were done through the CD-RISC, the PHQ-9, the GAD-7 scale, and the PHQ-15 scale.	The prevalence of depression, anxiety, somatization symptoms was found to be 47.1%, 31.9%, 45.9%, respectively.	During the COVID-19 outbreak

Si et al, 2020 (China)	COVID-19	863 medical care workers	cross-sectional study	IES-6, Depression, Anxiety and Stress Scale (DASS) and related psychosocial factors like perceived threat, social support and coping strategies.	The proportion of having symptoms of depression, anxiety and stress were 13.6, 13.9 and 8.6%, respectively.	During the COVID-19 outbreak
Li et al, 2020 (China)	COVID-19	176 frontline nurses	cross-sectional study	Anxiety was determined using the Hamilton anxiety scale.	77.3% (136/176) had anxiety.	During the COVID-19 outbreak
Cai et al, 2020 (China)	COVID-19	1173 frontline and 1173 age- and sex-matched non-frontline medical workers	case-control study	A set of online questionnaires were used to measure mental problems (i.e., anxiety, insomnia, and depressive symptoms), and help-seeking behavior and treatment for these mental problems.	Frontline medical workers had higher rates of any mental problem (52.6% vs. 34.0%), anxiety symptoms (15.7% vs. 7.4%), depressed mood (14.3% vs. 10.1%) and insomnia (47.8% vs. 29.1%) than non-frontline medical workers.	During the COVID-19 outbreak
Xiao et al, 2020 (China)	COVID-19	958 effective responses	cross-sectional study	The prevalence of stress, anxiety and depression were determined by using PSS-14 and HAD.	54.2% and 58% of participants had symptoms of anxiety and depression.	During the COVID-19 outbreak
Casagrande et al, 2020 (Italy)	COVID-19	2291 respondents.	cross-sectional study	Sleep quality, sleep disorders, generalized anxiety symptoms, psychological distress, and PTSD symptomatology related to COVID-19 were assessed.	57.1% of participants reported poor sleep quality, 32.1% high anxiety, 41.8% high distress, and 7.6% reported PTSD symptomatology.	During the COVID-19 outbreak
An et al, 2020 (China)	COVID-19	1103 Emergency	cross-sectional study	Depression and QOL were measured using the 9-item Patient Health Questionnaire, and the World Health	The overall prevalence of depression in 1103 ED nurses was 43.61%.	During the COVID-19 outbreak

				Organization Quality of Life Questionnaire-Brief Version, respectively.		
Chen et al, 2020 (China)	COVID-19	A total of 31 inpatients	cross-sectional study	The depression module of the PHQ-9, the GAD-7 scale, and the SRQ-20 mental health self-assessment questionnaire were used to assess depression, anxiety, and overall mental health.	32.3% had symptoms of depression and 19.4% had symptoms of anxiety.	During the COVID-19 outbreak
McCracken et al, 2020 (Sweden)	COVID-19	n=1,212; mean age 36.1 years; 73% women	cross-sectional study	Standardized measures of depression, anxiety, and insomnia as well as measures of risk and vulnerability factors known to be associated with poor mental health outcomes. A self-administrated smartphone questionnaire based on the PHQ-9 and psychological and behavioral responses was distributed to the general public.	The findings show levels of depression, anxiety, and insomnia in Sweden, at rates of 30%, 24.2%, and 38%, respectively.	During the COVID-19 outbreak
Zhang et al, 2020 (China)	COVID-19	A total of 1342 subjects participated in this study	cross-sectional study	Hierarchical multiple regression analysis and multivariate logistic regression analysis were conducted to explore the associated factors of depression.	The prevalence of depression among the general public during the COVID-19 pandemic was 182/1342 (13.6%).	During the COVID-19 outbreak
Ning et al, 2020 (China)	COVID-19	The 612 neurology staff members	cross-sectional study	Symptoms of anxiety and depression were assessed by the Chinese version of the SAS and SDS.	The prevalence of probable anxiety and depression in neurological nurses (20.3 and 30.2%) was higher than that in doctors (12.6 and 20.2%).	During the COVID-19 outbreak

Khanal et al, 2020 (Nepal)	COVID-19	A total of 475 HCWs	cross-sectional study	Anxiety and depression were measured using a 14-item Hospital Anxiety and Depression Scale and insomnia was measured by using a 7-item Insomnia Severity Index.	41.9% of HCWs had symptoms of anxiety, 37.5% had depression symptoms and 33.9% had symptoms of insomnia.	During the COVID-19 outbreak
Liang et al, 2020 (China)	COVID-19	A total of 899 frontline medical workers and 1104 respondents	cross-sectional study	Depression, anxiety, insomnia, and resilience were assessed via the PHQ-9, GAD-7, ISI, and abbreviated CD-RISC-10, respectively.	23.33%, 16.67%, and 6.67% of the general population in Hubei Province and 18.25%, 9.22%, and 7.17% of the general population in other regions reported symptoms of depression, anxiety, and insomnia, respectively.	During the COVID-19 outbreak
Dai et al, 2020 (China)	COVID-19	A total of 307 patients	cross-sectional study	The questionnaire consisted of a set of items on demographic characteristics, a set of items on clinical characteristics, the Self-Rating Anxiety Scale, Self-Rating Depression Scale, and Pittsburgh Sleep Quality Index.	The prevalence of anxiety and depressive symptoms were 18.6% and 13.4%, respectively.	During the COVID-19 outbreak
Xu et al, 2020 (China)	COVID-19	8817 hospital workers	cross-sectional study	An online survey was conducted to collect sociodemographic features, epidemic-related factors, results of PHQ-9, GAD-7, PHQ-15, SSI, and the score of stress and support scales.	The prevalence of depression, anxiety, somatic symptoms, and SSI were 30.2%, 20.7%, 46.2%, and 6.5%, respectively.	During the COVID-19 outbreak
Fang et al, 2020 (China)	COVID-19	A total of 191 front-line non-medical workers	cross-sectional study	The PANAS, the SRQ and the PHQ were used.	50.3% 96 participants reported the clinically significant symptoms of depression.	During the COVID-19 outbreak

Islam et al, 2020 (Bangladesh)	COVID-19	1311 community-dwelling individuals	cross-sectional study	An online survey assessing socio-demographic variables and using the Panic Disorder Severity Scale and GAD-7 to assess panic and anxiety symptomatology, respectively. Binary logistic regression analyses were conducted.	Estimates of panic and generalized anxiety were 79.6%, and 37.3%, respectively.	During the COVID-19 outbreak
Fong et al, 2020 (Hong Kong)	COVID-19	590 eligible participants	cross-sectional study	Mental status was made up of 10 items, nine of which were adopted from the validated PHQ-9.	Additionally, approximately one third of the participants (29.7%) had moderate to severe depression.	During the COVID-19 outbreak
Wang et al, 2020 (China)	COVID-19	A total of 274 respondents	cross-sectional study	Anxiety, depression, sleep quality, stress and resilience were evaluated using scales including GAD-7, PHQ-9, PSQI, PSS-14, and CD-RISC-10.	The overall prevalence of anxiety, depression and insomnia were 13.9% (9.8%-18%), 16.1 (11.7%-20.4%) and 19.7% (15.0%-24.4%), respectively.	During the COVID-19 outbreak
Song et al, 2020 (China)	COVID-19	A total of 14,825 doctors and nurses	cross-sectional study	The social support of participants was measured by the PSSS, the CES-D was used to assess depressive symptoms, PTSD was assessed by the PCL-5.	The prevalence rates of depressive symptoms and PTSD were 25.2% and 9.1%, respectively.	During the COVID-19 outbreak
Naser et al, 2020 (Jordan)	COVID-19	A total of 4,126 individuals	cross-sectional study	The PHQ-9 and Generalized Anxiety Disorder-7 (GAD-7) were used to assess depression and anxiety.	The prevalence of depression and anxiety among the entire study participants was 23.8% and 13.1%, respectively.	During the COVID-19 outbreak
Duan et al, 2020 (China)	COVID-19	359 children and 3254 adolescents	cross-sectional study	Spence Child Anxiety Scale, Child Depression Inventory and Coping style Scale.	22.28% respondents were suffering from depressive symptoms.	During the COVID-19 outbreak

Fu et al, 2020 (China)	COVID-19	A total of 1242 Wuhan residents investigated	cross-sectional study	Multivariate logistic regression models were used to evaluate the association between demographic factors and anxiety, depression, sleep disorder, and passive coping style.	27.5% had anxiety, 29.3% had depression, 30.0% had a sleep disorder, and 29.8% had a passive response	During the COVID-19 outbreak
Bäuerle et al, 2020 (Germany)	COVID-19	15 704 German residents	cross-sectional study	Besides demographics, GAD-7, PHQ-2 and DT were assessed.	Generalized anxiety (44.9%), depression (14.3%), psychological distress (65.2%) and COVID-19-related fear (59%).	During the COVID-19 outbreak
Islam et al, 2020 (Bangladesh)	COVID-19	A total of 476 university students	cross-sectional study	Depression was determined by using the PHQ-9. Anxiety was evaluated by using the GAD-7.	Around 15% of the students reportedly had depression, whereas 18.1% were suffering from anxiety.	During the COVID-19 outbreak
Civantos BA et al, 2020 (Pennsylvania)	COVID-19	A total of 349 physicians	cross-sectional study	Burnout, anxiety, distress, and depression were assessed by the single-item Mini-Z Burnout Assessment, 7-item Generalized Anxiety Disorder Scale, 15-item Impact of Event Scale, and 2-item Patient Health Questionnaire, respectively.	Anxiety, distress, burnout, and depression were reported in 167 (47.9%), 210 (60.2%), 76 (21.8%), and 37 (10.6%) physicians, respectively.	During the COVID-19 outbreak
Nie et al, 2020 (China)	COVID-19	A total of 78 patients	cross-sectional study	Depression was assessed using the SDS. Anxiety was assessed using the SAS.	Prevalence of depression and anxiety symptoms were diagnosed in 35.9% and 38.5% of the patients, respectively.	During the COVID-19 outbreak
Wang et al, 2020 (China)	COVID-19	A total of 2737 HCWs	cross-sectional study	The questionnaires consisted of three elements: baseline characteristics, PSQI, and HADS. The primary outcome variables were PQSI, anxiety and	About 61.6% of the respondents reported sleep problems, 22.6% experienced anxiety, and 35% exhibited depressive symptoms.	During the COVID-19 outbreak

				depression scores of non-medical staff, non-frontline medical staff and frontline medical staff.		
Chi et al, 2020 (China)	COVID-19	2,038 completed the survey.	cross-sectional study	Poor mental health included prevalence of clinically-relevant anxiety and depressive symptoms.	Prevalence of PTSD, anxiety, and depressive symptoms, and PTG was 30.8, 15.5, 23.3, and 66.9% respectively.	During the COVID-19 outbreak
Ying et al, 2020 (China)	COVID-19	845 participants	cross-sectional study	Mental health status was assessed using the Chinese versions of the GAD-7 and PHQ-9.	The prevalence of anxiety and depression symptoms were respectively 33.73% and 29.35%	During the COVID-19 outbreak
Zhou et al, 2020 (China)	COVID-19	4805 female adolescents	cross-sectional study	Depression was assessed using the CES-D, and the correlative factors of depression were analyzed.	Of them, 1899 (39.5%) suffered from depression.	During the COVID-19 outbreak
Wang et al, 2020 (China)	COVID-19	19,372 valid questionnaires	cross-sectional study	Psychological distress and sleep problems were measured by the Generalized Anxiety Disorder-7, the Patient Health Questionnaire-9, and the Insomnia Severity Index.	12.2% of the participants had anxiety symptoms 11.0% were likely to have depression symptoms 13.3% of participants had insomnia symptoms.	During the COVID-19 outbreak
Effati-Daryani et al, 2020 (Iran)	COVID-19	205 pregnant women	cross-sectional study	The data collection tool was the socio-demographic characteristics questionnaire and the DASS-21 (Depression, Anxiety and Stress Scale-21).	Depression, stress, and anxiety symptoms were observed in 32.7, 32.7, and 43.9% of the participants.	During the COVID-19 outbreak
Almater et al, 2020	COVID-19	One hundred and seven participants	a simple random study	Four validated psychiatric assessment tools were used to detect symptoms of depression, anxiety, insomnia, and stress perception.	About half of the physicians exhibited symptoms of depression (50.5%), anxiety (46.7%), and insomnia (44.9%).	During the COVID-19 outbreak

(Saudi Arabia)

Rossi et al, 2020 (Italy)	COVID-19	8147 individuals	cross-sectional study	Selected outcomes were PTSS, depression, anxiety, insomnia, perceived stress, and adjustment disorder symptoms (ADS). The survey collected socio-demographic information and severity of depressive symptoms using the Patient Health Questionnaire-9 and anxiety symptoms through the Generalized Anxiety Disorder-7.	PTSS were 37%, 17.3% for depression, 20.8% for anxiety, 7.3% for insomnia, 21.8% for high perceived stress and 22.9% for adjustment disorder.	During the COVID-19 outbreak
Paz et al, 2020 (Latin America)	COVID-19	A total of 759 patients completed	cross-sectional study	The SDS for depression, SAS for anxiety, the PSQI for sleep quality, and the IES-R for PTSS.	20.3% presented moderate to severe symptoms of depression and 22.5% of anxiety.	During the COVID-19 outbreak
Peng et al, 2020 (China)	COVID-19	2237 individuals	cross-sectional study	The DASS-21 and the IES-R ratings.	The prevalence of depressive symptom was 6.21% in quarantined individuals.	During the COVID-19 outbreak
Tee et al, 2020 (Philippines)	COVID-19	A total of 1879 completed online surveys	cross-sectional study	The nine-item PHQ-9 was used to screen and measure the severity of symptoms of depression. SASRQ questionnaire was used to measure residents acute stress in accordance with Diagnostic and	16.3% of respondents rated the psychological impact as moderate-to-severe; 16.9% reported depressive symptoms; 28.8% had anxiety levels; and 13.4% had stress levels.	During the COVID-19 outbreak
Imran et al, 2020 (Pakistan)	COVID-19	10,178 postgraduate trainees	cross-sectional study		The prevalence of depressive symptoms, generalized anxiety disorder and acute stress disorder were 26.4%, 22.6% and 4.4%, respectively.	During the COVID-19 outbreak

Passos et al, 2020 (Portugal)	COVID-19	550 participants,	cross-sectional study	Statistical Manual of Mental Disorders, fourth edition, criteria for acute stress disorder. Socio-demographic data were collected in addition to four validated scales: CAGE (acronym cut-annoyed-guilty-eye) Questionnaire, Satisfaction with Life Scale, Generalized Anxiety Disorder-7 and Patient Health Questionnaire-2.	The prevalence of anxiety was 71.3%, the prevalence of depression was 24.7% and 23.8% of the sample had both depression and anxiety.	During the COVID-19 outbreak
Huang et al, 2020 (China)	COVID-19	A total of 6261 people	cross-sectional study	Self-reported mental health scales including the Patient Health Questionnaire and Self-Rating Anxiety Scale were included.	17.2% people indicated the prevalence of depression, 13.5% of participants were considered to have anxiety.	During the COVID-19 outbreak
Zhang et al, 2020 (China)	COVID-19	123,768 workers	cross-sectional study	Symptoms of anxiety and depression were measured by the Zung's Self-Rating Anxiety Scale and Self-Rating Depression Scale.	The prevalence of anxiety and depression symptoms was 3.4% and 22.8%, respectively.	During the COVID-19 outbreak
Zhou et al, 2020 (China)	COVID-19	859 respondents	cross-sectional study	The mental health status was assessed by patient health questionnaire, generalized anxiety disorder scale, insomnia severity index, somatization subscale of the symptom checklist 90, and PTSD checklist-5.	5.3%, 6.8%, 2.4%, 2.6%, and 0.9% of pregnant women were identified to have symptoms of depression, anxiety, physical discomfort, insomnia, and PTSD, respectively. The corresponding prevalence rates among non-pregnant women were 17.5%, 17.5%, 2.5%, 5.4%, 5.7%, respectively.	During the COVID-19 outbreak

Huang et al, 2020 (China)	COVID-19	A total of 1,172 respondents	cross-sectional study	All subjects were evaluated with the 7-item GAD-7 scale, the somatization subscale of the SCL-90-R, and the 7-item ISI.	The percentages of anxiety, somatization, and insomnia were 33.02%, 7.59%, and 24.66%, respectively.	During the COVID-19 outbreak
Hong et al, 2020 (China)	COVID-19	4,692 nurses	cross-sectional study	PHQ-9 was used to assess the depression symptoms, GAD-7 was used to evaluate anxiety disorders, The PHQ-15 was applied to assess somatic symptoms.	9.4% were considered to have depressive symptoms, 8.1% represented anxiety, and 42.7% had somatic symptom.	During the COVID-19 outbreak
Liu et al, 2020 (China)	COVID-19	2,031 respondents	cross-sectional study	The 21-item DASS, which is a revised, simplified version of the original DASS developed by Lovibond et al., was used in this study.	14.81%, 18.3%, and 9.98% had depression, anxiety and stress symptoms, respectively.	During the COVID-19 outbreak
Elkholy et al, 2020 (Egypt)	COVID-19	502 HCWs	cross-sectional study	Symptoms of anxiety, insomnia, depression and stress, and analyzing potential risk factors.	77.3%, 69.5%, 79.3%, and 83.1% of all participants reported symptoms of anxiety, Insomnia, depression, and stress, respectively.	During the COVID-19 outbreak
Mrklas et al, 2020 (Canada)	COVID-19	5990 respondents	cross-sectional study	Self-reported stress, anxiety, depression, and contamination/hand hygiene obsessive-compulsive symptoms.	Anxiety, and depression symptoms were 85.6%, 47.0%, and 44.0%, respectively.	During the COVID-19 outbreak
Khan et al, 2020 (Bangladesh)	COVID-19	505 college and university students	cross-sectional study	Data was collected by using online questionnaire including DASS 21 and IES. Descriptive analysis and bivariate linear regression were performed to examine the association of variables.	28.5 % of the respondents had stress, 33.3% anxiety, 46.92% depression from mild to extremely severe.	During the COVID-19 outbreak

Gupta et al, 2020 (India)	COVID-19	1124 HCWs,	cross-sectional study	Demographic data, questions on COVID-19 and scores of the Hospital Anxiety and Depression Scale were analyzed using the chi-square test (Bonferroni correction) and binary logistic regression.	The prevalence of anxiety and depressive symptoms were reported as 37.2% and 31.4%, respectively.	During the COVID-19 outbreak
Sut et al, 2020 (Turkey)	COVID-19	403 pregnant women	cross-sectional study	The hospital anxiety and depression scale were used to measure anxiety and depression.	The prevalence of anxiety and depression was 64.5% and 56.3%, respectively.	During the COVID-19 outbreak
Şahin et al, 2020 (Turkey)	COVID-19	939 HCWs	cross-sectional study	The sociodemographic data form, Patient Health Questionnaire-9, General Anxiety Disorder-7, Insomnia Severity Index, and Impact of Event Scale-Revised.	Seven hundred twenty-nine (77.6%) participants exhibited depression, 565 (60.2%) anxiety, 473 (50.4%) insomnia, and 717 (76.4%) distress symptoms.	During the COVID-19 outbreak
Arafa et al, 2020 (Japan)	COVID-19	426 HCWs	cross-sectional study	The survey assessed HCWs regarding their sociodemographic and occupational features, sleeping hours, and psychological impacts of the COVID-19 pandemic using the DASS-21.	69% had depression, 58.9% had anxiety, 55.9% had stress, and 37.3% had inadequate sleeping.	During the COVID-19 outbreak
Sandesh et al, 2020 (Pakistan)	COVID-19	A total of 112 Healthcare Professionals	cross-sectional study	A carefully structured form was created, which included the (DASS-21).	There were 72.3% participants suffered depression, 85.7% participants suffered anxiety, and 90.1% participants were reported stress.	During the COVID-19 outbreak
Wu et al, 2020 (China)	COVID-19	A total of 24,789 respondents	cross-sectional study	Hospital Anxiety and Depression Scale (HADS) to estimate the prevalence of anxiety and depression were used.	the overall prevalence of anxiety, depression, combination of anxiety, and depression were 51.6%, 47.5%, and 24.5%, respectively.	During the COVID-19 outbreak

Parra-Saavedra et al, 2020 (Colombia)	COVID-19	A total of 1021 patients	cross-sectional study	The questions evaluated demographic, knowledge, psychological symptoms, and attitudes data regarding the COVID-19 pandemic.	50.4% of the entire cohort reporting symptoms of anxiety, 49.1% insomnia, and 25% reporting depressive symptoms.	During the COVID-19 outbreak
Fernández et al, 2020 (Argentina)	COVID-19	The data (n = 4408) was collected	cross-sectional study	Psychological distress clusters were determined using latent profile analysis on a wide-range of symptoms using the complete Brief-Symptom Inventory-53.	Phobic-Anxiety (41.3%), Anxiety (31.8%), Depression (27.5%), General-Distress (27.1%), Obsession-Compulsion (25.1%) and Hostility (13.7%).	During the COVID-19 outbreak
Suryavanshi et al, 2020 (India)	COVID-19	197 healthcare professionals (HCP)	cross-sectional study	Data were collected on demographics, depression, and anxiety using validated tools, quality of life, and perceived stressors.	A large proportion reported symptoms of depression (92, 47%), anxiety (98, 50%), and low QoL (89, 45%).	During the COVID-19 outbreak
Arafa et al, 2020 (Japan)	COVID-19	1629 people	cross-sectional study	Sociodemographic characteristics, sleeping hours per day, and psychological disturbances (depression, anxiety, and stress) of participants using the Depression Anxiety Stress Scale-21.	The participants reported a high prevalence of depression (67.1%) anxiety (53.5%), stress (48.8%), and inadequate sleeping (< 6 h/day) 23.1%.	During the COVID-19 outbreak
Essadek et al, 2020 (France)	COVID-19	8004 French students	cross-sectional study	Three mental health scales, previously validated in French, were used to measure the level of depression (PHQ-9), anxiety (GAD-7) and distress (IES-R).	43% of students suffered from depression, 39.19% suffered from anxiety and 42.94% from distress.	During the COVID-19 outbreak

Liu et al, 2020 (China)	COVID-19	A total of 1090 medical staff	cross-sectional study	The questionnaire included PSS-10, GAD-7 and PHQ-9.	The estimated self-reported rates of anxiety symptoms, depression symptoms and both of the two were 13.3%, 18.4% and 23.9% respectively.	During the COVID-19 outbreak
Caillet et al, 2020 (France)	COVID-19	Two hundred and eight people	cross-sectional study	The HADS and IES-R was used.	The incidence of anxiety and depression were 48% and 16%, respectively. PTSD symptoms were present in 27% of respondents.	During the COVID-19 outbreak
Giusti et al, 2020 (Italy)	COVID-19	Three hundred and thirty health professionals	cross-sectional study	Socio-demographic data, COVID-19 emergency-related work and psychological factors, state anxiety, psychological distress, post-traumatic symptoms and burnout.	Two hundred and thirty-five health professionals (71.2%) had scores of state anxiety, 26.8% had depression, 31.3% of anxiety, 34.3% of stress, 36.7% of post-traumatic stress.	During the COVID-19 outbreak
Su et al, 2020 (China)	COVID-19	403 residents in	cross-sectional study	The prevalence of anxiety (defined as Generalized Anxiety Disorder-7 score \geq 5).	prevalence of anxiety was 37.7%.	During the COVID-19 outbreak
Zhou et al, 2020 (China)	COVID-19	11,835 adolescents	cross-sectional study	Insomnia, depression, and anxiety symptoms using the PSQI, the PHQ-9, and the GAD-7 questionnaires, respectively.	the prevalence of insomnia symptoms during part was 23.2%.	During the COVID-19 outbreak
M.Sc et al, 2020 (Cameroun)	COVID-19	The sample size was 292	cross-sectional study	The diagnosis of anxiety and depression was made by the HAD (Hospital Anxiety and Depression scale).	The symptoms of anxiety ranging from mild to severe and those of depression was 42.20% and 43.50% respectively.	During the COVID-19 outbreak

Prasad et al, 2020 (USA)	COVID-19	347 survey responses	cross-sectional study	The survey incorporated a variety of validated mental health assessment tools to measure participant burnout (Mini-Z assessment), anxiety (Generalized Anxiety Disorder-7), distress (Impact of Event Scale), and depression (Patient Health Questionnaire-2).	A total of 30.0% respondents reported symptoms of burnout; 69.5%, symptoms of anxiety; 84.1%, symptoms of at least mild distress; and 22.8%, symptoms of depression.	During the COVID-19 outbreak
Li et al, 2020 (China)	COVID-19	88611 teachers	cross-sectional study	Anxiety was assessed by using GAD-7.	The overall prevalence of anxiety was 13.67%.	During the COVID-19 outbreak
Azoulay et al, 2020 (France)	COVID-19	1058 respondents	cross-sectional study	The Hospital Anxiety and Depression Scale and the Peritraumatic Dissociative Experience Questionnaire were used.	The prevalence of symptoms of anxiety, depression, and peritraumatic dissociation was 50.4%, 30.4%, and 32%, respectively.	During the COVID-19 outbreak
Teng et al, 2020 (China)	COVID-19	2614 participants	cross-sectional study	Depression in first-line staff was assessed by the PHQ-9, The SAS was used to assess anxiety in the front-line staff.	anxiety (23.4%), depression (50.0%), and fatigue (73.7%) to be common in frontline workers.	During the COVID-19 outbreak
Banna et al, 2020 (Bangladesh)	COVID-19	A total of 1,427 participants	cross-sectional study	Their mental health was assessed by the DASS-21 measure.	59.7% suffered from stress symptoms, 33.7% of participants reported symptoms of anxiety, more than half (57.9%) of the depressive symptoms.	During the COVID-19 outbreak
Liang et al, 2020 (China)	COVID-19	570 participants	cross-sectional study	The diagnosis of PTSD was done by using the PCL-C.	12.8% of all participants with the symptoms of PTSD.	During the COVID-19 outbreak

Yáñez et al, 2020 (China)	COVID-19	303 healthcare workers	cross-sectional study	Healthcare workers' anxiety, distress, and turnover intention were assessed using the seven-item GAD-7 scale, 48 the K6, 49 and the two-item turnover intention scale, 50 respectively.	21.7% healthcare workers in Peru experienced severe anxiety, whereas 26.1% of them experienced severe mental distress.	During the COVID-19 outbreak
Li et al, 2020 (China)	COVID-19	A total of 1109 participants	cross-sectional study	28-item General Health Questionnaire, 22-item Impact of Events Scale-Revised and 28-item Brief Coping Inventory to measure their psychiatric disorders, PTSD level and coping strategies.	42.65% and 67.09% self-reported psychiatric disorders and high PTSD level, respectively.	During the COVID-19 outbreak
Zhan et al, 2020 (China)	COVID-19	Participants were 1,794 front-line nurses	cross-sectional study	The Ascension Insomnia Scale, Fatigue Scale-14 and Perceived Stress Scale were used.	The prevalence of insomnia among participants was 52.8%.	During the COVID-19 outbreak
Chang et al, 2020 (Korea)	COVID-19	64 patients	cross-sectional study	The participants and evaluated the presence of PTSD using the PCL-5 based on the DSM-5.	The prevalence rate of PTSD was 20.3% in patients.	During the COVID-19 outbreak
Lee et al, 2006 (Hong Kong, China)	SARS	146 participants	cross-sectional study	PTSD, Depression	14.1% of older people and 13.9% of residents developed signs of probable PTSD.	After the period of the SARS outbreak
Lee et al, 2018 (Korea)	MERS	72 survivors consented to be registered.	multi-centered prospective follow-up study	chronic fatigue, depressive symptoms, and PTSS.	The prevalence rates of CFS, depression, and PTSD were 32.7%, 17.3%, and 26.9%, respectively.	12 months (T1) and 18 months (T2) after the MERS outbreak

Chan et al, 2006 (Hong Kong, China)	SARS	elder(n=NA)	Poisson Regression Model	Suicide rate in Hong Kong.	The elderly suicide rate increased to 37.46/100,000 in 2003.	NA
Zheng et al, 2006 (Japan)	SARS	619 students from mainland China	cross-sectional study	The impact of the 2003 SARS outbreak on Chinese students living in Japan.	The results showed approximately 60% of the respondents felt an impact of SARS on college life	During the SARS outbreak
Mak et al, 2009 (Hong Kong, China)	SARS	Ninety subjects were recruited,	cohort study	Psychiatric morbidities were assessed by the Structured Clinical Interview for DSM-IV, the Impact of Events Scale–Revised and the Hospital Anxiety and Depression Scale. Functional outcomes were assessed by the Medical Outcomes Study 36-Item Short-Form Health Survey.	Post-SARS cumulative incidence of DSM-IV psychiatric disorders was 58.9%. Current prevalence for any psychiatric disorder at 30 months post-SARS was 33.3%. One-fourth of the patients had post-traumatic stress disorder (PTSD), and 15.6% had depressive disorders.	30 months after the SARS outbreak
Wing et al, 2012 (Hong Kong, China)	SARS	A total of 369 Chinese SARS survivors	case-control study	Physical, sleep, or psychiatric disorders	Survivors who reported varying rates of posttraumatic stress disorder (30–40%), depression (25%), and fatigue symptoms (50%).	After a mean post-SARS duration of 39 months.
Jeong et al, 2016 (Korea)	MERS	1,692 patients, 1,656 were not	A retrospective survey	Anxiety symptoms were evaluated with the Generalized Anxiety Disorder 7-item scale and anger was assessed with the State-Trait Anger Expression Inventory at	In isolated people during isolation, 7.6% had symptoms of anxiety and 16.6% had feelings of anger. At four to six months after release from isolation, anxiety	During the isolation period.

		diagnosed with MERS.		four to six months after release from isolation for MERS.	symptoms were observed in 3.0%. Feelings of anger were present in 6.4%.	
Lam et al, 2009 (Hong Kong, China)	SARS	233 survivors	semi structured clinical interview	Psychiatric illnesses, chronic fatigue	Over 40% of the respondents had active psychiatric illnesses, and 27.1% met the modified 1994 Centers for Disease Control and Prevention criteria for chronic fatigue syndrome.	mean period of time after SARS, 41.3 months
Lung et al, 2009 (Taiwan, China)	SARS	127 HCWs	A Follow-up Study	The psychological impact of SARS bio-disaster	15.4% showed mental symptoms, and 84.6% did not show obvious symptoms.	one-year follow-up
Wu et al, 2005 (Hong Kong, China)	SARS	195 adult patients	case-control study	This study examined the occurrence rate and associated risk factors for PTSD, anxiety, and depression among SARS survivors.	14% met the cutoff for the Anxiety subscale; 18% met the cutoff for the Depression subscale.	1 month after their discharge
Su et al, 2007 (Taiwan, China)	SARS	SARS units ([n = 44] and SARS ICU [n = 26]) and two non-SARS units (Neurology [n = 15] and	prospective and periodic follow-up design study	PTSD symptoms, sleep quality, and attitude scores	Results showed that depression (38.5%vs.3.1%) and insomnia (37%vs.9.7% were, respectively. Two groups were found in the prevalence of post-traumatic stress symptoms (33% vs. 18.7%), three-unit subjects had significantly higher rate than those in CCU (29.7% vs. 11.8%, respectively).	During the SARS outbreak

		CCU [n = 17]).)				
Cheng et al, 2004 (Hong Kong, China)	SARS	10 patients with confirmed SARS	cross-sectional study	'Mild' psychiatric problem,'severe' psychiatric problems	Mild psychiatric problems such as anger, anxiety, suicidal ideas and depress reaction 70%, hallucinatory and manic features 30%.	During the period of the outbreak
Cheng et al, 2004 (Hong Kong, China)	SARS	180 patients	cross-sectional study	The Beck Anxiety Inventory and the Beck Depression Inventory to measure psychological distress.	About 35% of respondents reported 'moderate to severe' or 'severe' ranges of anxiety and/or depressive symptoms.	SARS survivors discharged from hospital for 4 weeks or more.
Chen et al, 2005 (Taiwan, China)	SARS	SARS exposure (n=65) and low risk of SARS exposure (n=45).	cross-sectional study	The symptoms of psychological stress reactions included anxiety, depression, hostility, and somatization.	The results showed that 11% of the nurses surveyed had stress reaction syndrome.	during the peak of the SARS outbreak in 2003
Chua et al, 2004 (Hong Kong, China)	SARS	271 HCWs from SARS units and 342 healthy control subjects	cross-sectional study	Psychological effects of SARS	HCWs reported significantly more positive (94%) and more negative psychological effects (89%) from SARS than did control subjects.	During the period of the outbreak

Chong et al, 2004 (Taiwan, China)	SARS	1257 HCWs	cross-sectional study	SARS-related stress and its immediate psychological impact and responses among health workers.	The estimated prevalence of psychiatric morbidity in this sample was 75.3%, and it was higher in the repair phase (80.6%) than in the initial phase (71.3%).	During the period of the outbreak
Lee et al, 2018 (Korea)	MERS	73 quarantined patients undergoing hemodialysis. After six weeks, to which 77 responded	cross-sectional study	The Mini International Neuropsychiatric Interview and Hospital Anxiety and Depression Scale were administered to patients undergoing hemodialysis.	The IES-R identified 42 respondents (54.5%) as having the presence of PTSD-like symptoms, and 31 (40.3%) as being eligible for a diagnosis of PTSD.	During the period of the outbreak
Bonanno et al, 2008 (Hong Kong, China)	SARS	997 survivors,	longitudinal study	Psychological and physical functioning at each time point was measured using the 12-item Medical Outcome Study SF-12.	The relatively high proportion of hospitalized SARS survivors (13%) who exhibited delayed psychological dysfunction.	6, 12, and 18 months after hospitalization
Lee et al, 2006 (Hong Kong, China)	SARS	235 consecutive pregnant women recruited and a historical cohort of 939	case-control study	Both cohorts completed standardized rating scales on depression, anxiety, and social support.	The anxiety level of the SARS cohort was slightly higher than that of the pre-SARS control. No statistical difference was found between the depression levels of the two cohorts.	During the period of the outbreak

		pregnant women recruited a year before the outbreak.				
KO et al, 2006 (Taiwan, China)	SARS	A total of 1552 respondents	cross-sectional study	This study investigates the psychosocial impact and the associated factors of depression of the SARS epidemic in Taiwan when the epidemic had just been controlled.	The prevalence of occurring depressive symptoms experienced by all participants during the previous week was 3.7%.	When the epidemic had just been controlled.
Kwek et al, 2006 (Singapore)	SARS	survivors (n=148)	cross-sectional study	Postal survey comprising Health-Related Quality of Life (HRQoL) questionnaires and anxiety and depression measures was sent to them at 3 months' post discharge.	41% had scores indicative of a posttraumatic stress disorder (PTSD); about 30% had likely anxiety and depression.	3 months' post discharge
Hawryluk et al, 2004 (Canada)	SARS	The survey was completed by 129	cross-sectional study	Psychological effects of quarantine on persons.	Symptoms of PTSD and depression were observed in 28.9% and 31.2% of respondents, respectively.	During the period of the outbreak
Tam et al, 2004 (Hong Kong, China)	SARS	Six hundred and fifty-two questionnaires were returned	cross-sectional study	The General Health Questionnaire was used to identify psychological distress. Sociodemographic and stress variables were entered into a logistic regression analysis to find out the variables associated with psychological morbidity.	Sixty-eight per cent of participants reported a high level of stress. About 57% were found to have experienced psychological distress.	During the period of the outbreak

Lee et al, 2007 (Hong Kong, China)	SARS	Survivors treated in 2 major hospitals (non-HCKs, n = 49; HCKs, n = 30). Survivors from the same hospitals (non-HCWs, n = 63; HCWs, n = 33)	follow-up study	General Health Questionnaire (GHQ-12) and measures of depression, anxiety, and posttraumatic symptoms.	Compared with control subjects (PSS-10 scores =19.8 and 17.9, respectively; P < 0.01), and this persisted 1 year later (PSS-10 scores =19.9 and 17.3, respectively; P < 0.01) without signs of decrease. In 2004, SARS survivors also showed worrying levels of depression, anxiety, and posttraumatic symptoms.	1 Year After the Outbreak
Lu et al, 2006 (Taiwan, China)	SARS	Participants consisted of 135 HCWs	cross-sectional study	Mental symptoms on HCWs	17.3% developed significant mental symptoms, and 82.7% showed no obvious symptoms.	During the period of the outbreak
Lin et al, 2006 (Taiwan, China)	SARS	emergency department staff(n=92)	cross-sectional study	To determine the influence of SARS on the psychological status, including post-traumatic stress disorder (PTSD) symptoms, of the staff in the emergency department.	86 of 92 (93.5%) medical staff considered the SARS outbreak to be a traumatic experience.	During the period of the outbreak

Wu et al, 2009 (USA)	SARS	Employees (n = 549) of a hospital in Beijing	cross-sectional study	Mental health on employees	Respondents who had been quarantined, or worked in high-risk locations such as SARS wards, or had friends or close relatives who contracted SARS, were 2 to 3 times more likely to have high PTS symptom levels, than those without these exposures.	36 months after SARS
Reynolds et al, 2008 (Canada)	SARS	1057 returned the completed questionnaire	cohort study	The Impact of Events Scale – Revised (IES-R) to assess symptoms of post-traumatic stress disorder (PTSD).	An IES-R score of at least 20 was found for 14.6% of respondents (n=148, 95% CI 12.4–16.8).	During the period of the outbreak