Original Article

A Review on Anxiety Disorders During Covid-19 Pandemic-Homoeopathic Perspective

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Abstract

Background: The unprecedented Covid-19 pandemic has created havoc in most areas of human lives. Anxiety disorders are the most prevalent psychiatric disorders, and the incidence increased in recent times. Homoeopathy is an alternative system of medicine with evidence-based effectiveness in mental health issues. There is a dearth of literature concerning the potential utility of Homoeopathy in the management of psychological issues during this pandemic. Objectives: This overview aims to assess the commonly prevalent anxiety disorders during Covid-19 and assess the usefulness of homoeopathic medicines in managing anxiety. Materials and methods: Selective literature in PubMed search engine to identify most prevalent anxiety disorders during Covid-19 using terms "Covid-19" and "Anxiety" and available research studies in homoeopathy on anxiety have been put forward in this narrative review. Results: The identified anxiety disorders during Covid-19 and the role of Homoeopathy in managing anxiety disorders have been summarized in the article. The homoeopathic perspective of anxiety and the rubrics related to anxiety disorders in different repertories are discussed. Conclusion: mental health is a critical concern in the pandemic's scenario, and Homoeopathy can be a safe and effective alternative or adjunctive to the conventional system in the management of anxiety disorders during this chaotic situation.

Keywords: Anxiety, Covid-19, Coronaphobia, Generalized Anxiety Disorder (GAD), Homoeopathic treatment of Anxiety.

Introduction

The COVID-19 pandemic is a major health crisis affecting several nations, with millions of confirmed cases and thousands of deaths reported to date. Such widespread outbreaks are associated with adverse mental health consequences [1]. The unprecedented Covid-19 pandemic has created havoc in most human lives and has generated a rise in psychological distress worldwide [2]. The pandemic has resulted in unprecedented hazards to mental health globally, reporting relatively high rates of anxiety, depression, post-traumatic stress disorder, psychological distress, and stress in adults, adolescents, and children [3-4].

There is a recent shift of focus from physical to psychosocial implications during Covid-19. Anxiety disorders are the more prevalent psychiatric disorders, and their incidence is increased during this pandemic. "Coronaphobia," i.e., fear of Coronavirus disease, is a relatively new pandemic-related construct that is strongly related to functional impairment and psychological distress [5].

Definitions

Anxiety is an emotion characterized by feelings of apprehension, fear, tension, anxious thoughts, and physical symptoms such as palpitations, sweating, feelings of stress, and increased blood pressure,



for example. Anxiety is associated with muscle tension and vigilance in preparation for future danger. Anxiety is only an indicator of underlying disease when feelings become excessive, all-consuming, and interfere with daily living. **Fear** is an emotional response to a real or perceived imminent threat, associated with surges of autonomic arousal necessary for fight or flight and adaptive response to realistic threat [6]. **Phobia** is an irrational fear of a specific object, situation, or activity, often leading to persistent avoidance of the feared condition [7]. **Panic** is sudden uncontrollable fear or anxiety, often causing wildly unthinking behavior. Panic attacks are a particular type of fear response, i.e., abrupt surges of intense fear or discomfort that peak within minutes [6].

Anxiety disorders (ADs) are a group of mental disorders characterized by powerful feelings of worry, anxiety, or fear that are strong enough to interfere with one's daily activities. Anxiety disorders are the most prevalent psychiatric disorders and are associated with a high burden of illness. Anxiety disorders are often underdiagnosed and undertreated in primary care. Treatment is indicated when a patient shows marked distress or suffers from complications resulting from the disorder [8].

The true prevalence of ADs is unknown as many people do not seek help or clinicians fail to make the diagnosis. The global burden of anxiety disorders represents 10.4% Disability-adjusted life years (DALY). The lifetime prevalence of specific phobias worldwide ranges from 3% to 15% [9]. The urban metropolitan residents have the highest prevalence compared to rural areas. Occurrence of more severe psychiatric impairments, including depression (29%), anxiety (34%), and post-traumatic stress disorder (34%), was observed in COVID-19 patients along with mild symptoms [10]. In a study conducted in China, the overall prevalence of Generalized Anxiety Disorder (GAD), depressive symptoms, and sleep quality of the general population were 35.1%, 20.1%, and 18.2%, respectively [11]. Few studies compared psychological outcomes for people quarantined with those not quarantined; quarantined people were significantly more likely to report anxiety [12].

The exact cause of Anxiety Disorders is unknown. However, several risk factors like Family history of depression or Anxiety disorder, Childhood abuse, Low self-esteem, Female sex, the White race, Environmental stress, Drug withdrawal, or misuse are associated with the onset of anxiety disorders [6]. Presently available clinical genetic studies point to a considerable heritability of anxiety disorders (30-67%), with multiple vulnerability genes [13]. Certain medical conditions, e.g., heart, lung, and thyroid conditions, can cause symptoms similar to anxiety disorders or make anxiety symptoms worse [6]. Research from other outbreaks of infectious disease suggests that perceived vulnerability to disease may play a role in both Coronaphobia and coronavirus-related Xenophobia (dislike of or prejudice against people from other countries). Likewise, lack of information and misinformation, often aided by sensational popular media headlines and foci, have been shown to fuel health-related fears and phobias [14].

ANXIETY DISORDERS DURING COVID 19

The standard kind of anxiety disorder prevalent during covid-19 is Generalized anxiety disorder [11,15]. The other kinds include Specific phobias, Panic disorder, and other mixed and unspecified anxiety disorders in adults and separation anxiety disorder in childhood.

Generalized Anxiety Disorder (GAD): The essential feature of **GAD** is anxiety, which is generalized and persistent but not restricted to, or even strongly predominating in, any particular environmental circumstances (i.e., it is "free-floating"). Dominant symptoms are highly variable, but complaints of persistent feelings of nervousness, trembling, muscular tension, sweating, lightheadedness, palpitations, dizziness, and epigastric discomfort are common. Fears that the sufferer or a relative



will shortly become ill or have an accident are often expressed, together with various other worries and forebodings [16].

Specific Phobias (Simple or Isolated phobia) are characterized by an excessive, unreasonable fear of specific objects or situations that always occur on exposure to the feared stimulus. There are several kinds of specific phobias based on the focus of apprehension. Phobias that are common during Covid-19 is *Germaphobia*, which is a pathological fear of germs, bacteria, microbes, contamination, and infection. It is known by a range of other terms, including *Mysophobia* (fear of uncleanliness), *Verminophobia*, *and Bacillophobia*. *Thanatophobia* -fear of death. Blood, injection, injury-type phobias may become more prevalent during this scenario. Such phobias include Fear of blood, injections and transfusions, other medical care, and Fear of injury [17]. There are corresponding rubrics for these fears in the homoeopathic repertories.

Other kind of Neurotic disorder that requires a special mention during Covid-19 context is **Obsessive-Compulsive Disorder**. A person may develop predominantly obsessional thoughts or ruminations (Ex: repeated thoughts of Corona death) or predominantly compulsive acts [obsessional rituals like washing hands beyond when and what is necessary] or mixed obsessional thoughts and acts. The containment measures implemented to reduce the progression of the COVID-19 pandemic can increase the risk of mental disorders, including obsessive-compulsive disorder (OCD) [17].

How does COVID-19 worsen Anxiety and other Neurotic disorders?

Patients with GAD or anxiety about health may find it hard to manage fears that they or a loved one will contract the virus. While this is a reasonable fear during a pandemic, individuals with GAD or health anxiety will worry excessively, to the point that they are unable to function normally. Panic disorder, agoraphobia, and social anxiety often lead to isolation and withdrawal. Usually, therapists encourage their clients with anxiety disorders to get out of the house and fight the urge to self-isolate. Nevertheless, COVID-19 is forcing people to do just that. For persons with OCD, the current guidelines to prevent the spread of the virus, such as excessive hand washing, cleaning, and disinfecting, could reinforce the disorder.

MANAGEMENT OF ANXIETY

Anxiety can be managed with lifestyle modifications, behavioral therapies, medications, or combinations based on the severity and distress in an individual. Physical exercise, relaxation techniques, correct breathing techniques, psychotherapy, cognitive behavioral therapy, dietary adjustments like restricting alcohol intake and caffeine are advisable as per the case demands. In conventional medicine, Selective serotonin reuptake inhibitors (SSRIs), Serotonin-norepinephrine reuptake inhibitors (SNRIs), and Benzodiazepines are used to treat anxiety. These are effective but are no devoid of side effects and have the potential to become addictive. Homoeopathy is an established system of medicine with evidence-based effectiveness in mental health issues, and adverse events are hardly reported in these studies [18]. The purpose of the present paper is to summarize a homeopathic approach to evaluating and treating anxiety disorders relevant to COVID-19.

MATERIALS AND METHODS

A search was done in PubMed with keywords "Anxiety" and "Covid-19" 7512 articles have been identified (23-10-2020). The familiar anxiety disorders incident during Covid-19 are identified. The available data regarding anxiety disorders managed with Homoeopathy has been searched in various peer-reviewed and indexed journals with the search words "Anxiety" and "Homoeopathy." Fifteen articles were identified, the details of which are mentioned in the Results section.



RESULTS

There is a convincing, although limited evidence-based, for the usefulness of Homoeopathy in Psychiatry [18, 19]. A total of 15 studies on Anxiety were found in different peer-reviewed journals of Homoeopathy. One systematic review, two RCTs, 1 cohort study, 6 Case reports/ case series, and five animal studies were identified. Few uncontrolled and observational studies on anxiety reported positive results, including high levels of patient satisfaction with homoeopathy [20].

A randomized, double-blind, placebo-controlled trial suggests that homoeopathic therapy can be an effective method to treat anxiety and depression disorders [21]. There are also few reports of usefulness in Specific Phobia and Social Phobia [22, 23]. A study to find out the effectiveness of individualized homoeopathic medicines for managing anxiety symptoms with a case series Small N Design concluded that Individualized Homoeopathic Medicines are beneficial in reducing the symptoms of anxiety [24]. An epidemiological cohort study conducted to compare utilization of conventional psychotropic drugs among patients seeking care for anxiety and depression disorders (ADDs) from general practitioners (GPs) who strictly prescribe conventional medicines (GP-CM), regularly prescribe homoeopathy in a mixed practice (GP-Mx) or are certified homoeopathic GPs (GP-Ho), concluded that patients with ADD, who chose to consult GPs prescribing homoeopathy reported less use of psychotropic drugs, and were marginally more likely to experience clinical improvement, than patients managed with conventional care [25].

In an animal model study, ultra-diluted *Aconitum napellus*, a homoeopathic medicine used by clinicians to treat acute anxiety, was inferred that ultra-diluted homoeopathic Aconite has decreased anxiety in Wistar rats which were subjected to acute restrain stress [26]. Homeopathic doses of *G. sempervirens* (5, 7, and 30 CH) positively influenced the emotional responses of mice to novel environments, suggesting an improvement in exploratory behavior and a decrease in thigmotaxis or neophobia [27]. In another animal study, a fraction derived from the methanol extract of *Passiflora incarnata* has been observed to exhibit significant anxiolytic activity at a dose of 10 mg/kg in mice using elevated plus-maze(EPM) model of anxiety [28]. EPM model is an animal model of anxiety for evaluating putative anxiolytic (alleviating anxiety) or anxiogenic (anxiety-inducing) compounds. In this study, a plus-maze apparatus consisting of two open arms (16×5 cm.) and two closed arms (16×5×12 cm.) having an open roof, with the plus-maze high (25 cm.) from the floor was used to observe anxiolytic behavior in animals. Another study conducted on 24 mice showed an anxiolytic effect of a homeopathic preparation of *Pulsatilla nigricans* comparable to that found with a standard drug (Diazepam) [29]. Mother tincture of *Turnera aphrodisiaca*, a remedy traditionally used for anxiety neurosis, is found to have anxiolytic activity [30].

An experimental model on newly born female rats, *Zincum metallicum* 6c, seems to prevent anxiety-like behavior induced by maternal deprivation in childhood. However, the study concludes that other studies still need to be developed to understand the physio-pathological basis of these effects [31]. Another study was conducted to assess behavioral changes in zebrafish (*Danio rerio*) induced by sodium arsenate by analyzing locomotor activity and anxiety-related parameters and determining whether ultra-diluted substances can mitigate neurobehavioral effects. The animals intoxicated by the heavy metal sodium arsenate showed increased anxiety, which Arsenicum Album reversed in a *6cH dilution*, proving to be more effective as a possible anxiolytic [32].

Although studies were pointing to that the effect of homoeopathic treatment on mental symptoms of patients with generalized anxiety disorder did not differ from that of a placebo [33], there is supporting evidence for the effectiveness of Homoeopathy in Anxiety disorders. There are also few publications related to various psychological implications during Covid-19 [34] and reports of a case



of exacerbation of OCD during Covid-19 that was well managed with Individualized homoeopathy [35].

Assessment of Anxiety disorders

Some of the Assessment tools that would be helpful for the assessment of ADs are Generalized Anxiety Disorder- 7 (GAD-7) [36], Hamilton Anxiety Rating Scale-(HAM-A) [37], American Psychiatric Association Severity Measures for Phobia [38], Hospital Anxiety and Depression Scale (HADS) Depression [39], Anxiety and Stress scale (DASS)-21 [40]. Coronavirus Anxiety Scale- (CAS) is a simple, 5-question specific rating helpful scale for assessing anxiety during Covid-19 [41, 42]. It is suggestible to use these scales in future research studies.

DISCUSSION

Homoeopathy is a system of medicine that has a unique etiological consideration in terms of miasms. Psora is the root cause of all mental diseases and the dominant miasm in all anxiety disorders. Anxiety and fear are considered to be psoric in origin by most stalwarts, including Hahnemann [43,44,45,46]. Miasmatic study of fear and anxiety is shown in table 1. In Aphorisms 225-227, Hahnemann deals with so-called mental diseases, and he suggests psychical remedies and radical anti-psoric treatment [47].

Table no. 1 Miasmatic representation of Anxiety and Fear

•				
STALWART	PSORA	SYCOSIS	SYPHILIS	TUBERCULAR
Samuel Hahnemann	Anxiety and cold perspiration Palpitation with anxiety Anxiety several times a day Fear of fire, fear of being alone, fear of becoming insane			
Phyllis Speight	Anxious when ill, apprehensive, despondent, melancholy Full of fear Sudden anxiety with strong palpitation of heart	Oppression and anxiety when weather changes	Oppression and anxiety at night Restless, mental spells, patient is driven out of bed inducing thoughts of suicide	
Henny Heudens	Fearful, Worry Blushing Ailments from fear, anxiety Fear of something will happen	Hurried impatient	Fear of other people Fear of being killed	Fear of animals
S. K. Banerjee	Anxiety on morning Fear of darkness Fear of strangers apprehension	Anxiety from change of weather Fear of making mistakes Fear of poverty	Anxiety at night Fear is manifested through anguish	Fear of dogs



Commonly indicated remedies in Anxiety Disorders are *Argentum nitricum, Gelsemium sempervivens, Arsenicum album, Calcarea carb, Silicea, Lycopodium, Pulsatilla, Natrum mur, Ignatia, Sepia, Staphysagria, Kali phosetc* [34,48,49]. It may also be noted that homoeopathic remedies like Arsenicum album, Gelsemium, and Phosphorus that are suggested in the management of Covid-19 are also indicated in anxiety [50]. Some of the crucial rubrics related to anxiety disorders in different repertories have been presented below in the repertories [51].

Homoeopathy can be a safe and effective alternative in mild to moderate cases and as an adjuvant therapy to the conventional system to manage severe cases of anxiety.

Synthesis Repertory

MIND - ANXIETY - ill, as if he would be: (1)

maias-l. (maiasaura lapidea)

MIND - ANXIETY - alone; when: (38)

MIND - ANXIETY - health; about - own health; one's: (87)

MIND - ANXIETY - hypochondriacal: (65)

MIND - ANXIETY - business; about: (34) **NUX-V**.

MIND - ANXIETY - crowd; in a: (20) **ACON. AMBR**

MIND - ANXIETY - suicidal disposition, with: (13) *Aur. Dros. Merc. Puls. Rhus-t.*

MIND - ANXIETY - sudden: (17)

MIND - ANXIETY - trifles, about: (47) ALOE

MIND - ANXIETY - sedentary life; from: (2) *Ars.* graph.

MIND - APPREHENSIONS

MIND - ANTICIPATION - impending evil; sensation of: (3) brass-n-o (brassica napus oleifera) *Maias-l.* merc.

MIND - DEATH - presentiment of - calmly thinks of death: (2) bell-p-sp. zinc.

MIND - DEATH - presentiment of - soon and that she cannot be helped; believes that she will die: (1) *Agn*.

MIND - DEATH - desires - anxiety, from: (2) bell. caust.

MIND - PANIC (FEAR - sudden): (51)

MIND - FEAR - contagion: (20) **ARS. CARC.**.

MIND - FEAR - infection, of: (16) *Borx.* **CALC.** *Syph.*

MIND - FEAR - disease, of impending: (162). **KALI-C. PHOS.**

MIND - FEAR - death, of - sudden death; of: (7) *Arn. Ars. Cench.*

MIND - FEAR - death, of - alone, when: (15)

MIND - FEAR - approaching; of: (57)

MIND - FEAR - hospital; going to the: (3) arg-n. calc. kali-s.

MIND - FEAR - disaster; of: (19) Puls. Scut.

MIND - FEAR - public places

MIND - FEAR - lung disease; of: (4) anh. Aral.

arg-n. podo.

The Repertory of Kent

MIND - FEAR - happen, something will: (34)

MIND - FEAR - pneumonia, of: (1) chel.

MIND - THOUGHTS - disease: (11)

Boerick Repertory

MIND - Fears dread - Death, fatal diseases, impending evil: (39)

MIND - Fears dread - People: (17)

MIND - Fears dread - Touch, contact: (28)



Comp	lete	Rer	erto	rv

MIND-Anxiety, business about, dyspepsia from

- Nux-v

MIND-Anxiety, future about, with disgust of life -lach

MIND-Anxiety, health about, loved persons of carc,hep,merc

MIND-Anxiety, about himself -Sil

MIND-Anxiety, hypochondriacal mania to read medial books -calc

MIND-Fear, Agoraphobia - lyss, *Arg-n, kali-p, sepia*

MIND-Fear, of fresh air - Coff, Cap

MIND-Fear, of alone being in dyspnea - *Lyc*

MIND-Fear, panic attacks, overpowering -Cann-

MIND-Fear, of people, anthropophobia - *Acon, Anac, Aur, Cic, Con*

MIND-Anticipation, physician before going to - *Gels, Phos,Tub*

Phatak Repertory

A - Anticipation - diseased, conditions of: (7) apis *Ars.* bry. *Chin.* chinin-s. nat-m. nux-v.

A - Agoraphobia: (7)

A - Anthropophobia bashful: (14). **BAR-C. HYOS. PULS.**

F - Fear, anxiety, fright: (41).

F - Fear, anxiety, fright - poison: (10)

T - Thought, buried, in - unpleasant subject, fixed on: (1) cocc.

Boger Repertory

MIND - Anthropophobia, aversion to others, etc.: (32)

MIND - Fearsome, anxiety, dread, frightened easily, etc. - future; of: (38)

MIND - Fearsome, anxiety, dread, frightened easily, etc. - incurable, being: (9) acon. alum. arn. calc. *Ign.* lac-c. *Lach.* lil-t. *Stann.*

CONCLUSION

Mental health is a critical concern in a pandemic scenario, and there is a need to reduce the mental health burden of this pandemic. The long-term mental health impact of COVID-19 may take weeks or months to become fully apparent, and managing this impact requires concerted effort not just from psychiatrists but from the health care system at large. Therefore, it is suggested that Homoeopathic physicians should screen individuals for anxiety disorders, choose appropriate assessments and prescribe homoeopathic medicines to relieve the suffering of persons during this crisis. Homoeopathy can be a safe and effective alternative or adjunctive to the conventional system in managing anxiety disorders during this chaotic situation.

Conflict of Interest

Authors disclose that there are have no potential/actual conflicts of interest – financial or personal.

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