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Review Article

SCOPE OF *YOGA* IN REDUCING STRESS AND MANAGEMENT OF PSYCHOLOGICAL ISSUES DURING THE CURRENT PANDEMIC- A REVIEW OF EXISTING LITERATURE

Arun Gupta[1]*, Meenakshi Verma[2]

*[1]Medical Officer, (Ayurveda), Dept. of Indian Systems of Medicine, Jammu.

[2]Associate Program Manager, NHM, JKUT, India.

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***Address for correspondence**
Dr. Arun Gupta
Medical Officer (Ayurveda), Dept. of Indian Systems of Medicine, Jammu.
Mobile: 9596306387
Email: gupta.arun9@gmail.com

ABSTRACT

With the emergence of Covid 19 pandemic due to increased socio-economic curbs and increased uncertainty of life, psychological disorders are getting surged up. Due to restricted access and poor mental health care facilities, *Yoga* can be seen as possibility to give a respite to the vulnerable populations and individuals. **Aims and Objectives**: To establish the role of *Yoga* as an effective therapeutic modality for catering the need of emerging psychological health issues during Covid 19 pandemic. **Material and Methods:** (a) Narrative review of existing scientific literature on the mental health and *Yoga* especially during Covid-19. (b) Studies specifically related to high-risk or vulnerable populations (c) Review of effectiveness of *Yoga* interventions on the mental health (d) Evidence based use of the Yogic interventions in mitigation of commonly manifested signs of psychological distress during Covid-19 pandemic. Total in depth study of 28 articles dealing with the above mentioned areas. Many methodological and research gaps are noted. **Discussion:** In Indian context, many research gaps exist in the study of *Yoga* as an effective therapeutic modality for psychological first aid and mental health care, especially in the emergent Covid 19 pandemic. **Conclusion:** Globally and nationally there is need to plan and execute high quality research studies to establish Yoga as an evidence based therapeutic modality especially for management of Psychological disorders and to include *Yoga* in existing mental health care services.

INTRODUCTION

Pandemics are the social stressors which endanger the community and social health in a big way. In the present scenario, it is being witnessed that Covid 19 pandemic changed the social order in terms of curtailment of social interaction, change in social behaviors, personal freedom. Every change in the status quo is accompanied by some resistance which directly or indirectly causes psychological stress among individuals with spillover effects in their personal and social lives. While managing the health disasters physical manifestation of disease are catered with more urgency than mental and psychological aspects which may later come as backlash. Psychological health issues after the life changing pandemic are bound to occur. During pandemic times, our work and life living patterns changed drastically due to quarantine and social distancing leading to increased stress. WHO identified social isolation, fear of catching the infection and loss of family members compounded by the loss of income and employment are some of the major psychological stressors[1]. An Iranian study also pointed towards the unpredictability, uncertainty, seriousness of the diseases, misinformation and social isolation as contributing factors to the stress and mental morbidity[2]. Reports from all across the world highlighted the increase in the mental distress due to pandemic situation. A study in Ethiopia reported a threefold increase in the prevalence of the symptoms of

depression compared to the estimates from Ethiopia before the epidemic. A cumulative review of four Chinese studies revealed that anxiety with impaired sleep are the most common complaints reported by the study participants with higher rates of anxiety and depression among females, students and with lower perception of the health and wellbeing.[3] A Japanese study identified patients with COVID-19 and their families, individuals with existing physical or psychiatric morbidity and health care workers at higher risk of adverse mental health outcomes.[4] In Indian context, Hirenath et al, identified vulnerable groups to be affected by mental illnesses include older adults, the homeless, migrant workers, mentally ill, pregnant women. Anxiety, loneliness, difficulty in concentration and low motivation, lowered stress threshold, negative emotional spirals, desperation, panic and fear, apprehensions about future are some of the commonly noted impacts of lockdown, noted in the study[5]. A study by Hawryluck et al. on 129 quarantined persons during SARS epidemic in 2003 demonstrated the high incidence of symptoms of post-traumatic stress syndrome and depression.[6]

Yoga has always been regarded as a tool of resilience and allaying fear confusion since antiquity. India, the land of *Yogis* and learned saints always took refuge in the *Yogic* philosophy for solutions of the psychological conflicts and disorders. With the uncertainty about the definitive treatment and rehabilitation of the COVID-19, *Yoga* is a seen as an instrument of physical as well as mental health promotion. United Nations also endorsed the role of *Yoga* i.e., guided meditation in maintaining the wellness during Covid 19 pandemic as a self care strategy.[7] Government of India also took various initiatives to promote *Yoga* for self-care during the pandemic.[8] National Institute of Mental Health and Neurosciences of India, also included *Yoga* in their guidelines for General Medical and Specialized mental health care settings.[9]

Many national and international studies assessed the manifestation of psychological issues among various populations and groups during Covid-19 pandemic. Therefore, in order to formulate public health strategies, to promote mental health of vulnerable individuals and groups at an affordable cost and establishing *Yoga* as an evidence based therapeutic approach to combat and mitigate psychological issues, it is necessary to understand the existing psychological and mental health research literature. Hence, a narrative review of literature is planned to fill the knowledge gaps and identify the areas where effective *Yoga* interventions can be employed to optimize the individual and community psychological health.

Research Questions

1. Prevalence of the psychological issues, common manifestations and group susceptibility of psychological disorders during the Covid-19 pandemic at global level?
2. Prevalence of the psychological issues, common manifestations and group susceptibility of psychological disorders during the Covid-19 pandemic at national level?
3. What is the role of Yoga interventions in the management of the mental health issues during Covid-19 pandemic?
4. What is the clinical evidence of the effectiveness of the Yoga interventions in the management of mental health issues?

Methodology

Search Methodology and Article Selection

The current article is a narrative review of the existing literature on Yogic interventions relevant to the management of the Psychological issues prevalent during COVID-19 pandemic. The online database, PubMed, PubMed Central, Google Scholar and relevant search engines were searched for citations for keywords "Covid 19 and psychological issues", "COVID-19 anxiety and depression", "mental health during Covid 19 pandemic", "Mental Health during Covid 19", "Covid 19 and Mental Health issues in India", "anxiety", "depression" and "stress", "Yoga and mental health" "Yoga in anxiety, depression and stress" in various permutations and combinations. A total of 117 citations were retrieved using this method. On reviewing the above citations, 28 articles were included in the review, 32 articles were excluded, because they were available in the other languages and irrelevant from the point of view of the psychological issues and Yogic interventions. 57 articles were excluded from the review as these were short communications, case reports and not pertinent to the subject of the study.

Methodological and Thematic Analysis of Selected Articles

The methodological and thematic analysis of selected articles was done in accordance with the research questions. To study the global prevalence of psychological issues (n=8) articles, mostly cross sectional and systematic reviews were reviewed. Similarly to study the country wide epidemiological factors of psychological issues related with Covid-19 pandemic (n=6), cross sectional survey studies and systematic review articles were reviewed. To

study the use of Yoga interventions for the management of psychological issues during Covid-19 pandemic (n=6) literature review articles were reviewed. In order to study the effectiveness and safety of *Yoga* interventions (n=8) Randomized control trials, systematic reviews and meta-analysis articles were reviewed in detail. Review articles, editorials, commentary, pre-published papers, letter to editors were not included in the study. As it was not possible to conduct a formal systematic review or meta-analysis given the nature of the above publications, the above mentioned not included in the narrative review. Four broad themes were identified across the 28 publications, and were used to organize the review: (a) observational studies reporting on mental health symptoms in particular populations, (b) Studies specifically related to high-risk or vulnerable populations (c) Review of effectiveness of *Yoga* interventions on t the mental health (d) Evidence based use of the Yogic interventions in mitigation of commonly manifested signs of psychological distress during Covid 19 pandemic.

Results

Eight studies, all across the globe examined the frequency of specific psychological health-related variables in general population including health care workers and students summarized as follows in Table 1:

Table 1: International Observational Studies on Psychological Health during Covid-19 Pandemic

S.No	Study title, first author and Journal, Country	No. of Participants and cities/ states	Methodology, Assessment Scale	Results	Recommendation about Yoga
1.	A nationwide survey of psychological distress among Chinese people in the COVID-19 epidemic: implications and policy recommendations, Jianyin Qiu et al, Journal of General Psychiatry, China[10]	52730 valid responses 36 provinces, 35.27% Males and 64.73% females	Self report questionnaire CPDI Covid 19 Peritraumatic Distress index, Score> 52 indicative of severe distress	Higher incidence among females, Young adults 18-30 years of age, migrant workers, elderly population	Psychological first aid, Yoga Nil
2.	Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: a web-based cross-sectional survey, H Yuang, Journal of Psychiatric Research[11]	7236 respondents, 45.4% males, 54.6% females	Web based online survey, General Anxiety Disorder 7 scale, The centre for Epidemiology scale for depression, Pitts burg sleep Quality Index Scale used	35.1% prevalence of GAD, 20.1% depressive symptoms, 18.2% sleep quality issues, Younger adults <35 years of age, health care workers and people spending too much time on thinking about Covid 19	Psychological surveillance Yoga
3.	A Nationwide Survey of Psychological Distress among Italian People during the COVID-19 Pandemic: Immediate Psychological Responses and Associated Factors, Mazza Cristina et al, Intl. Journal of Environmental research and public health MDPI, [12]	2812, respondents, 71.7% females and 28.3% males	On line survey platform cross sectional study, Depression, Anxiety and Stress Scale–21 items	female gender, negative effect, and detachment were associated with higher levels of psychological distress	Nil
4	A longitudinal study on the mental health of general population during the COVID-19 epidemic in	1738 respondents from 190 Chinese cities	Longitudinal survey study with snowball sampling,	Moderate to severe stress in 8.1%, Anxiety in 28.8%, and depression in	Nil

	China, Wang et al, Journal of Brain Behaviour and Immunology[13]	67.3% respondents females	Impact of Event scale Revised, DASS-21 used	16.5%	
5.	The differential psychological distress of populations affected by the COVID-19 pandemic Zhang et al, Journal of Brain Behaviour and Immunology [14]	205 respondents from Guangdong province of China	App based online survey, Patient Health Questionnaire, General Anxiety Disorder scale 7 was used	29.2% prevalence of depression in patients who experienced the covid 19 infection	Nil
6.	A multinational, multicentre study on the psychological outcomes and associated physical symptoms amongst healthcare workers during COVID-19 outbreak[15]	906 health care workers	Self administered questionnaire DASS-21, Impact of events scale revised	5.3% screened positive for moderate to very severe depression, 8.7% for moderate to extremely severe anxiety, 2.2% for moderate to extremely severe stress, pre- existing comorbidities risk factor	psychological interventions for healthcare workers with physical symptoms
7.	he distress of Iranian adults during the Covid-19 pandemic– More distressed than the Chinese and with different predictors[16]	1058 respondents from 31 Iranian provinces	Online survey Covid 19 Peritraumatic Distress Index	Mean of CDPI greater than China, females experienced more stressed, 47% mildly to moderate distressed, 14.1% severely distressed	Nil
8.	Psychological effects of the COVID-19 outbreak and lockdown among students and workers of a Spanish university[17]	2530 members of the University of Valladolid	Cross sectional survey, DASS 21, Impact of event scale	21.34% moderate to extremely severe anxiety, 34.19% moderate to extremely severe depression and 28.14% moderate to extremely severe, 50.43% reported moderate to severe impact of the outbreak.	Larger scale psychological survey

As seen in the above results (Table 1), four (50%) out of eight studies, one study is multi-nation multi centre study including India. All studies web based or online cross sectional studies conducted on 69215 individuals. One study was conducted on the patients who experienced Covid-19 infection. Anxiety was the most prevalent manifestation of the psychological distress followed by depression and stress. Population based studies highlighted the increased risk of psychological distress among females, younger age group (18-35 years), elderly, and those with any pre-existing physical or psychological illness. DASS (Depression, Anxiety, Stress scale) -21 was the most commonly used scale. CPDI (Covid 19 Peritraumatic distress index) a newly designed scale in China was also used in two studies. Three out of eight studies identified the need for psychological surveillance, psychological interventions and psychological first aid but no study remarked Yoga as an intervention for psychological well being.

Studies on Mental Health during Covid-19 conducted in India

Six Indian studies reviewed based on general population as well as health care workers, mostly cross sectional survey are included in the review, summarized as follows in Table 2:

Table 2: Indian studies on the Psychological Health Variables during Covid-19

S.No	Study title, first author and Journal	No. of Participants and cities/ states	Methodology, Assessment Scale	Results	Recommen-dation about Yoga
1.	Initial psychological impact of COVID-19 and its correlates in Indian Community: An online (FEEL-COVID) survey M Varshney et al., PLOS one[18]	753 from 64 cities	Online Survey (FEEL COVID), Snowball Sampling, IES-R scale	1/3rd of respondents had significant psychological impact. Higher psychological impact predicted in Younger age, females, comorbid physical illness, contact history.	Nil
2.	Study of knowledge, attitude, anxiety & perceived mental healthcare need in Indian population during COVID-19 pandemic. Roy D et al. Asian journal of psychiatry, 51, 102083[19]	662 respondents from 25 states	Cross sectional Observational Study, snow ball sampling, Semi structured questionnaire on awareness, anxiety and perceived mental health care needs	Sleep difficulties, paranoia about acquiring COVID-19 infection and distress were reported in 12.5 %, 37.8 %, and 36.4 % participants respectively.	Nil
3.	COVID-19 and Lockdwon: A Study on the Impact on Mental Health Kazmi et al[20]	1000 respondents Uttar Pradesh	Google online survey, DASS 21 Scale used	Anxiety more in females, Males is more depressed, High prevalence in age group 15-35 years.	Nil
4.	Attitude, practice, behaviour and mental health impact of COVID-19 On doctors, Chaterjee et al., Indian Journal of Psychiatry[21]	152 doctors,	online survey with DASS-21	34.9% were depressed and 39.5% and 32.9% were having anxiety and stress, respectively.	Nil
5.	Psychological impact of COVID-19 on ophthalmologists-in-training and practising ophthalmologists in India, Khanna RC et al, Indian Journal of Opthalmology[22]	2355 Ophthalmologists	Online survey with PHQ-9 score	The mean PHQ-9 score was 3.98 (range, 0-27; SD, 4.65). In all, 768 (32.6%) had some degree of depression; mild in 504 (21.4%), moderate in 163 (6.9%), and severe in 101 (4.3%).	Nil
6.	Impact of COVID-19 on the Mental Health of the Society & HCW (Healthcare workers): A Systematic Review, Bibechana Thappa et	10 studies on health care workers	Systematic review of literature, self administered questionnaire with questions from Self administered Anxiety, Depression	High prevalence of anxiety, depression and difficulty in sleeping. Higher prevalence among Non-medical health employees, less	Nil

	al., International Journal of Science and Healthcare Research[23]		scale, Impact of Event scale revised, Depression, Anxiety, Stress scale-21 are the most frequently used scale.	educated employees	

As seen in the above results (Table 2), out of 6 studies five studies were cross sectional survey conducted online on 4922 respondents. One study is systematic review based on 10 studies conducted on the health care workers. In depth review of the study demonstrated that it is based on the Chinese studies. Three studies were conducted on the health care workers especially focused on the doctors. Three studies were conducted on the general population. One population study[18] reported prevalence of psychological distress in about one third of the respondents. Anxiety was noted the most prevalent symptom with depression and sleep disturbances. DASS-21 was the most commonly used scale for the assessment of the depression, anxiety and stress. Females, Young adults and adolescents are more prone to psychological distress (15-30 years) of age[18], pre-existing physical or psychological co-morbidity and contact history also pre disposing factors for the psychological distress. No Indian study listed or recommended Yoga as one of the mental health promotion strategy in conclusion and recommendations.

Studies on Yoga intervention and mental health during Covid-19

Six studies reviewed for potential of *Yoga* to be employed as psychological health promotion, five out of six studies are review studies and one is recommendations from a psychiatric association, summarized as follows in Table 3.

Table 3: Studies on the Yoga Intervention and mental health during Covid-19

S.No	Study title, first author and Journal, Country	Study Type	*Yoga*
1.	Public Health Approach of Ayurveda and *Yoga* for COVID-19 Prophylaxis, Tillu Girish et al, Journal of Alternative and Complementary medicines.[24]	Review	Yoga identified as home based practice for the prevention of Covid-19 Infection and post recovery management. *Pranayama* known for its action on the lung function and meditation reduce inflammation marker
2.	Yoga for Covid -19, HR Nagendra, International Journal of Yoga.[25]	Review	Special tailor made asana practice, pranayama and meditation and mantras can provide a broad spectrum immune build up in the body so that viral infection could be averted and virulence reduced. Tele yoga intervention for the prevention of nosocomial infections among health care workers.
3.	Positioning yoga in the COVID-19 pandemic, Shirley Telles, Yoga Mimansa[26]	Review	Yoga may be potential psycho-social intervention to reduce anxiety and insomnia and positively impact immune responses in Covid 19 cases.
4	Efficacy of practicing positive psychological interventions, yoga, and mindfulness meditation in COVID-19 lockdown[27]	Review	Yoga and mindful meditation identified as Positive Psychological Interventions for the prevention of psychological disorders during the Covid-19 and locked down period.
5	Using Pranayama or Yoga Breathing to Mitigate Stress and Anxiety during the COVID-19 Pandemic. Journal of Yoga Phys Ther Rehabil, Sukumaran et al, [28]	Review	Pranayama is effective in calming the mind, reducing worries and anxieties, improving focus and attention and increasing energy, bringing enthusiasm and positivity with boosting the immunity.
6	COVID 19: Impact of lock-down on mental health and tips to overcome, Hiremath et al., Asian Journal of Psychiatry[29]	Guidelines and Tips to Overcome Covid-19	Yoga and meditation is recommended for the management of Difficulty in concentration, low motivation, low threshold, negative emotion spirals and desperation.

From our review of existing literature, we could not be able to retrieve any clinical trial or interventional study or observational study on *Yogic* interventions in psychological health promotion, during the Covid-19 pandemic. Yoga is identified to be as an excellent home based self care mental health promotion strategy[24]. Yoga asana, meditation, Pranayama and Mantra can be used to boost immunity and used as preventive strategy against physical and mental illness[25]. Many mental health benefits especially calming of mind and reduction of anxiety were reported in the studies.

Studies on effectiveness of Yoga on Psychological symptoms of Anxiety Depression and Stress, PTSD

Eight studies reviewed for role of Yoga in mitigation of symptoms of Anxiety, Depression, Stress and Post-traumatic stress disorder, most of the studies were randomized clinical trials, in different groups of individuals summarized as follows in Table 4.

Table 4: Review of Studies on the role of Yoga in management of symptoms of Anxiety Depression and Stress, PTSD

S.No	Study title, first author and Journal	No. of Participants and cities/ states	Methodology, Assessment Scale	Results	Conclusion
1.	The Effect of Yoga on Stress, Anxiety, and Depression in Women, Shohani et al, International Journal of Preventive Medicine, 2018[30]	52 non pregnant and non athlete women Mean age 33.5 years	Quasi experimental with Pre-Post test, DASS 21, Hatha Yoga exercises for 4 weeks (3 times/ Week; 60-79 min each day)	Highly significant difference ($p < 0.001$) pre and post level of depression, anxiety and stress after the intervention	Yoga has an effective role in reducing stress, anxiety, and depression that can be considered as complementary medicine and reduce the medical cost per treatment by reducing the use of drugs.
2.	Effect of adjunct yoga therapy in depressive disorders: Findings from a randomized controlled study [31]	N=80, 40 in each group above 18 years of age total sample mean age 38.9 years of age	RCT, Two group assignment Inclusion on the basis of DSM-V criteria, period 30 days. Clinical Global Impression (CGI) Scale was applied at baseline and 30th day to view the severity of illness and clinical improvement.	By the 30th day, individuals in the yoga group had significantly lower scores of depression, anxiety, and CGI scores.	Anxiety starts to improve with short-term yoga sessions, while long-term yoga therapy is likely to be beneficial in the treatment of depression.
3.	Effect of *Yoga* therapy on anxiety and depressive symptoms and quality of life among care givers of in-patients with neurological disorders at a tertiary care centre in India: A randomized controlled trial, Umadevi P et al, Indian Journal of	N=43, *Yoga* group n-20, Control group n=23, age 18-60 years	Baseline scores of anxiety, depression and QOL assessed pre and post study	Highly significant ($p < 0.001$)	Decrease in anxiety and depression and improvement in quality of life.

	Psychiatry, 2013.[32]				
4.	Influence of Intensity and Duration of Yoga on Anxiety and Depression Scores Associated with Chronic Illness, Telles et al, African Journals online, 2015[33]	760 volunteers with 14-86 yrs of age	State-Trait Anxiety Inventory for anxiety and Hospital anxiety and depression scale.	Yoga practice in months and the time spent practicing yoga each day significantly predict the level of state anxiety (P< 0.001, P = 0.03) and HAD-A (P< 0.01, P < 0.01). The duration of yoga practice in months alone was a significant predictor of the HAD-D (P < 0.01).	
5.	Effect of holistic yoga program on anxiety symptoms in adolescent girls with polycystic ovarian syndrome: A randomized control trial[34]	90 adolescent girls 15-18 years of age.	Two groups assignment, 12 weeks of intervention- a holistic yoga module while control group practiced a matching set of physical exercise 1 hr/day for 12 weeks, state trait anxiety scoring used.	Mann-Whitney U test on difference scores of trait anxiety showed that changes after the intervention were significantly different between the two groups (P=0.002) with *Yoga* group.	
6.	Immediate effect of mind sound resonance technique on state anxiety and cognitive functions in patients suffering from generalized anxiety disorder: A self-controlled pilot study, Dhanosia Vipin et al, International Yoga Journal, 2015	N=15,	Self as control, Generalized Anxiety Disorder scale was used, 30 minutes of Mind sound resonance technique with supine rest was given for two consecutive days state anxiety levels and digital symbol substitution test were assessed before and after the intervention.	Comparison of the difference in scores for DLST and STAI before and after the two interventions (MSRT and SR) showed a significantly higher score for DLST (P < 0.05) and a significantly lower score for STAI (P < 0.01) for MSRT as compared with SR	MSRT may have a potential role in reducing state anxiety and enhancing psychomotor performance in patients suffering from GAD immediately after the practice.
7.	A Randomized Controlled Trial of Yoga for Pregnant Women With Symptoms of Depression and Anxiety[35]	n=46, pregnant women	Two group assignment	*Yoga* was associated with significantly greater reduction in negative affect as compared to treatment as usual	Prenatal Yoga only significantly outperformed TAU on reduction of negative affect.

8.	A comprehensive yoga programs improves pain, anxiety and depression in chronic low back pain patients more than exercise: An RCT[36]	n=80, 37 females, 43 males in a residential holistic health centre	Single blind RCT, State Anxiety and BDI (Beck's Depression Inventory)	State, trait anxiety reduced in the yoga group. Depression reduction 47% in the yoga group.	Seven days intensive residential Yoga program reduces pain, anxiety, and depression, and improves spinal mobility in patients with CLBP more effectively than physiotherapy exercises.

As seen in the above results (Table 4), all the eight studies were randomized controlled trials. Three out of five studies were carried out on women with different conditions. Two out of the eight studies were carried out with psychological stress associated with reproductive health issues. Over all 1166 patients with different health conditions associated with different physical and psychological conditions with predominance of anxiety, depression and stress were enrolled in the studies. State and trait anxiety scale was the most commonly used assessment used in these studies along with General anxiety disorder scale and Clinical Global Impression scale. Yoga demonstrably found to be effective in decreasing the anxiety, depression and stress and improving quality of life. Yoga is reported to be an excellent adjunct to conventional medicine and reduce the cost per treatment and reducing the use of drugs.[30] Improvement in anxiety by short term use of Yoga techniques noted while improvement in depression is the long term benefit of *Yoga*[31]. In a study involving the caregivers to critically ill patients of neurological or neuro-psychaitric disorders it came to fore that it help significantly reducing the anxiety and depression among the caregivers [32]. Duration of the daily Yoga practice and years of yoga practice were found to be predictive of the level of state of anxiety.[33]

DISCUSSION

Unlike China, there is no large scale observational and cross sectional studies conducted to explore the epidemiological factors determining the prevalence and incidence of psychological disorders during Covid-19 pandemic, in India. This is knowledge gap which must be filled to re-orient psychological and *Yogic* services to cater the psychological health needs of the affected and vulnerable population groups. The cross sectional survey studies conducted in India are more focused on health care workers especially doctors. As Doctors are highly educated and familiar with internet based surveys, it is easy to recruit them in these cross sectional studies. This also introduces selection bias in the study as these studies are not representative of the general population of the country. There is also a need to conduct studies on other vulnerable groups especially women, migrant workers and senior citizens. In most of the studies which are conducted in India, surprisingly, there is no mention or recommendation of *Yoga* as life style intervention to promote mental health. This should be addressed in future studies. In questionnaires, questions about *Yoga* routine, knowledge and attitude towards *Yoga* should also be incorporated. This also represent a knowledge and attitudinal gap about Yoga and its potential to treat physical and mental health disorders which can be addressed by incorporating *Yoga* in the academic curricula.

Many studies in different Yogic techniques like *Sudershana Kriya, Sahaja Yoga, Yogasana*, have been investigated to deliver promising results in the treatment of depression and found to be nearly as good as antidepressant drugs. Many clinical trials confirmed the benefits of Yoga in reducing the need for anti-psychotic drugs in anxiety disorders and schizophrenia. Additionally, Yoga also found to be effective in the management of drug/alcohol dependence, chronic back pain, somatoform pain disorders, cognitive impairment and dementia in senior citizens. Despite its observable effects on various psychological disorders, Yogic therapeutic interventions are yet to be integrated with the existing mental health service platforms. As evident from the review, no study[37] care as evident from the studies above that no study highlighted the importance of *Yoga* as a psychological aid to prevent and treat psychological distress.

In Table 3, review studies conducted on *Yoga,* it has been elaborated that by different mechanism yoga help in calming the mind and restores the psychological wellness. National Institute of Mental Health and Neurosciences has issued guidelines for Mental health care settings in which *Yoga* is projected as one of the self care technique and coping mechanism for children, senior citizens and pregnant women. During lockdown period a 40 minute specialized Yoga

module designed by the institution through online platforms called *Teleyoga* initiated with an objective of reducing psychological distress. Such programs should be made more popular all across India. Long term impact of such programs on psychological health of individuals registered for such programs must be studied through follow up studies and or cross sectional or cohort studies.

From the review of available literature it has been found that only *Asana, Pranayama* and *Meditation* were extensively studied. *Ashtanga Yoga* of *Patanjali* enunciates eightfold path of *Yoga,* where other path like *Yama, Niyama, Pratyahara, Dharana* by and large remained ignored. These four components can play a major role in the behavioral and emotional modulation leading to psychological comforting and can play an important role in psychological first aid. Similarly, use of principles of *Bhakti Yoga*, *Jnana Yoga* and *Karma Yoga* can assist the individuals to stabilize their vitiated emotions and calm the distressed mind. Institutions like S-VYASA have designed many techniques like MSRT, SMET etc. which can be employed in a personalized manner on case to case basis.

CONCLUSION

Yoga is an excellent coping strategy to deal with the distress caused by the prevalent Covid-19. As we know, disease resistance is an integrated attribute of mental and physical resilience, *Yoga* by virtue of its physical, mental and cognitive benefits helps in reinforcing the strength of human body and mind. *Yoga*, must integrated in the existing health care services at every level of care. Being an unobtrusive, non-pharmacological and cost–effective technique which requires very less investment for inclusion in the existing. Health care workers must be trained in using *Yoga* as Psychological first aid especially in the management of Psychological distress and mental health issues. India must capitalize on its huge wealth of trained Yoga practitioners and trainers who can be engaged part time to enhance the mental health asset of the community. The eight paths *Yoga* (*Ashtanga Yoga*) should be studied in its entirety rather than over-emphasizing only on *Asana*, *Pranayama* and *Dhyana* (Meditation) paths of *Yoga*, which are studied more frequently than the other paths. *Yoga* research requires to be made a continuous effort in every medical research institution in accordance to the guideline of Central Council of Research in Yoga with an objective to generate scientific data, so that this great science can be established as an Evidence Based Medicine especially for the management of Psychological Distress and Disorders.

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