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'Art at Safe Homes': A pioneer study among COVID-19 patients and their treatment team

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Abstract.

BACKGROUND: The novel coronavirus (COVID-19) has affected mental health all over the world. The resilience of people is heavily influenced by it.

OBJECTIVE: This study examined the usage of artistic engagement to overcome stress or anxiety of COVID-19 patients and the treatment team.

METHODS: The study was carried out at two safe homes for COVID-19 care in Kolkata, India. Different art and performance activities were implemented like drawing, theatre, poetry and music. All total 42 participants (24 patients and 18 treatment team) participated at the venture.

RESULTS: The study found isolation and fear of death as the most affecting factors for stress, and anxiety. Drawing therapy proved to be most suitable form for COVID-19 patients followed by music, theatre and poetry 66.67%, 57.14%, 21.43% and 7.14% respectively. The group art created by the participants depicted hope and care for next generation. Issues related to disease were the major focus of participants than socio-political issues with regard to forum theatre session. Almost every patient expressed their relief from stress by crying signifying the release from a high alert tension. The experience was the first time for the participants and almost 90% of them stated to have such kind of artistic engagement in future also.

CONCLUSION: This was perhaps the pioneer study of artistic engagement in COVID-19 patients as a tool to enhance resilience. From the humanitarian and scientific approach COVID-19 patients and treatment team should also come under the umbrella of Art Therapy.

Keywords: COVID-19 pandemic, art therapy, resilience, stress, forum theatre

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1. Introduction

"A pandemic is not just a medical phenomenon; it affects individuals and society and causes disruption, anxiety, stress, stigma, and xenophobia" [1]. Isolation, social distancing, and closure of educational institutes, workplaces, and entertainment venues due to lockdown compelled people to stay confined. This produces tremendous stress in mankind as a whole. The separation from social life, loss of freedom, boredom, and uncertainty can cause deterioration in an individual's mental health status [2, 3]. Particularly elderly people suffer from anxiety, distress, and induce a traumatic situation [4]. Many studies have been carried out on COVID-19 during the last two years from scientific and psychological sociological perspectives. Mudenda studied students in Zambia [5], Wang studied psychological distress and coping styles [6], Tee studied the psychological impact of COVID-19 in the Philippines [7], and Waseem studied the wellbeing of undergraduate medical students in Pakistan [8]. Unfortunately greater emphasis has been given to understand the epidemiology, clinical features, transmission patterns, and management of the COVID-19 outbreak while comparatively concern expressed over the effects on one's mental health is significantly scanty.

It is evident that the vision of health is changed. The World Health Organization (WHO) defines holistic health as: "viewing man in his totality within a wide ecological spectrum, and... emphasizing the view that ill health or disease is brought about by an imbalance, or disequilibrium, of man in his total ecological system and not only by the causative agent and pathogenic evolution" [9]. So complete physical, mental, and social well-being rather than merely the absence of disease or infirmity is now considered to be good health. Considering the psychological sphere of wellbeing it is shown that artistic engagement or artistic activities, both as an observer or active participant in creative efforts, can have a salient positive impact on important physiological parameters and can enhance resilience [9]. "Use of the arts in healing does not contradict the medical view in bringing emotional, somatic, artistic, and spiritual dimensions to learning. Rather, it complements the biomedical view by focusing on not only sickness and symptoms themselves but the holistic nature of the person" [10]. After World War II art therapy gradually extended its activities into several fields. At the same time different forms are being gradually incorporated in therapeutic action like Music, Dance and Movement, Drawing,

Theatre, Poetry therapies. Numerous brilliant works have been carried out throughout the world regarding art therapy. Kendra stated a brief overview of art therapy [11]. Reed reported on the prevention of burnout and building of resilience in health care professionals [12]. Several studies were done on cancer patients, [13-15]. Music engagement in relaxation and reduction of anxiety were done by Mettner [16] and Krout [17]. Drawing therapy draws the attention of researchers since advent of the century [18]. Staricoff reviewed medical literatures on art therapy [19]. Denisse reviewed the use of drawings on the clinical practice of Gestalt-therapy [20]. Vazquez et al. presented evaluation of the perceptual-motor maturity and perceptual disorder on individuals by hand drawing [21]. The healing power of poetry was described by Carrol [22]. Shen et. al. reported on reducing test anxiety through creative writing [23]. Expressive writing application was observed in patients with renal cell carcinoma by Milbury et al. [24], stress management and prevention [25], depression [26], and heart rate, heart rate variability and blood pressure [27]. Theatre therapy is one of the most important medium of art therapy. It developed as 'remedial drama' by people such as Peter Slade in the 1940s and 1950s and Sue Jennings in the 1960s and 1970s [28]. Certainly drama or theatre therapy owes debt to Winnicott [29] and Boal [30]. Feniger-Schaal and Orkibi [31] have reviewed the works on drama therapy. Newer forms and techniques are worked out by different researchers. Rousseau et al. [32] described the efficacy of Playback theatre which can successfully be used in expression of innerself. Corbett et al. [33] introduced SENSE theatre, a peer mediated intervention.

Application of artistic and performing activities involving COVID-19 patients and medical persons engaged with treatment probably is a pioneer study. Two group theatres from Kolkata, India, Goria Sucharcha (RGN. NO S/IL/24939 of 2004-2005) and Nandimukh (RGN. NO S/20840/77-78) have taken the initiative to work on patients and medical staffs of two safe homes, Athena Educational And Welfare Trust (Pranavananda Road, Garia, Kolkata - 700084) and Paschimbanga Rajya Pratibandhi Sammilani (147, Barakhala, Pratibandhi Village, Mukundapur, Kolkata - 700099) both situated in Kolkata. COVID-19 introduced a completely new dimension of the treatment and protocol of keeping the patients at hospitals or safe homes. Simultaneously workers involved in art therapy had to wear PPE KIT. Therefore facial expression was impossible to see and touch to feel the warmth which could create a psychological remoteness was prevented. Furthermore, the time for spending with the persons concerned was limited. It was only one and half hours to two hours as few patients occasionally needed oxygen support or felt fatigued. Interests were obviously there to continue but physical conditions did not permit. Therefore the work we did could not be called therapeutic in true sense at least etymologically speaking. Rather it could be termed as introducing art to triumph over mental stress and enhancing resilience to fight the disease.

2. Materials and method

2.1. Session of 2 hours

COVID-19 was an absolutely unprecedented situation and keeping this in mind we had to construct our methodology accordingly but obviously following broad guidelines regarding different art therapy forms. A semi-structured interview was conducted to find out the types of stress they feel during quarantine period. On the basis of that themes of art forms were determined. The catchphrase of the programme was: 'Well! Let's be a child'.

2.2. Theatre

First of all the diagnosis of the mental health status and the reasons behind the mental stress were identified through case study minimizing potential interruptions and avoiding conflicting procedures or activities scheduled [35]. Regarding theatre, the forum theatre method [34] has been followed. The theme and story of the play was created after receiving the case studies of the patients as well as the reasons they sited behind their stress. There were several reasons but after screening carefully and meticulously isolation and fear of death was found to be common factors. Therefore the play was based on these two issues. Before going through the detail drama production a brief session of brain storming games without much physical movements were carried out as the condition of the patients was not suitable for extensive physical games. These sessions were useful to prepare the participants for further process breaking the invisible wall of prejudices and shyness of spectators and at the same time could create a close rapport with the actors [34].

2.3. Drawing

Drawing therapy was done through two ways. A rough sketch of picture, termed as 'The Baby Under Care' was presented to the patients and asked to complete the image. The image then gradually finished by the participants by individual input and/or group discussion.

2.4. Creative writing

The participants were requested to write a poem but they decided to contribute a single line each. They considered this as a game and we encouraged their methodology.

2.5. Group singing

Two songs: 'We shall overcome' (We Shall Overcome chords by Pete Seeger. Courtesy: ultimateguiter.com, https://tabs.ultimate-guitar.com/tab/pete-se eger/we-shall-overcome-chords-1055577) and 'Ek jhank ichhe dana' (A group of wings of wish, *Ichhe dana* chords. Courtesy: unichords.com, https://www.uniquechords.com/guitar-chords-for-ichhe-dana-by-parash-pathar/) were chosen. The songs were sung and participants were asked to join either by singing, playing instrument with the song or just clapping according to the rhythm.

2.6. Feedback collection

Qualitative feedback was collected following Nainis et al. [35] but slightly modified:

- (1) Did you experience art therapy earlier? Yes/No
- (2) If given an opportunity, would you like to experience art therapy again? Yes/No
- (3) Did the art therapy session change your overall wellbeing? Yes/No
- (4) Did you feel comfortable making the art? Yes/No

2.7. Statistical calculation

Pearson correlation coefficient (r) was calculated to test the significance of age group and number of participants with the help of Statistics Kingdom (https://www.statskingdom.com/correlation-calculator.html). Regarding age groups the mid-point was taken into consideration.

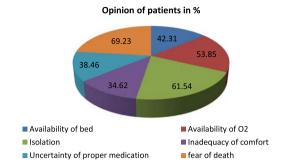


Fig. 1. Opinion of patients regarding the reasons of stress.

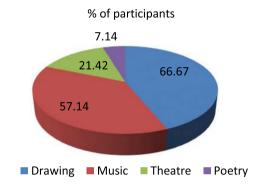


Fig. 2. Percentage of participants that took part in artistic activities.

3. Results

3.1. Reasons of stress

The stress of the present pandemic situation found was mainly of isolation, inadequacy of comfort, scarcity of O₂, availability of health persons, inadequacy of health services, fear of death during quarantine period at hospital/nursing homes/safe homes which consisted of (Fig. 1).

3.2. Participation of participants

66.67% participants took part in drawing activity followed by 57.14% in music, 21.42% in theatre and 7.14% in creative writing (poetry) (Fig. 2). The age group 60–70 was found to be most active in participation followed by 70–80, 30–40, 40–50, 50–60 and 20–30 (Fig. 3).

3.3. Theatre

At Athena the forum included both the patients and the persons involved with treatment, the doctor, nurses and ward persons. After discussion the

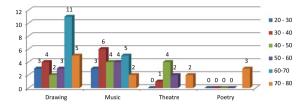


Fig. 3. Age distribution of participants in different artistic activities

play proposed by the group was as follows: A female patient of 40 years (actress Sonali Chattopadhyay) was admitted for 3 days at the safe home with moderate crisis of Oxygen deficiency. Her father and mother were also COVID-19 positive and although they were at their home there was the possibility that at any time they might also face deterioration. They had other co morbidity factors and they were old enough for handling their treatment of their own. Due to her absence she was expecting bad news to come from home any time. Tremendous anxiety and tension were mounting over her and she was unable to get rid of that stress. Doctor (actor Arijit Chakraborty) came for routine visit. She broke out stating that she might not see her parents any more. The doctor suggested her to control herself and face the problem boldly. He also advised to increase her mental strength and resilience to cope up. He raised the issues related to politics and other social crises but nobody from the participants showed interest and remained silent. At this point the Joker stopped the play and asked for more specific process for stress management. A female patient of around 70 years proposed prayer to the Almighty as a method for mental strength. But subject reported that this is not sufficient and she needed some more specific and materialistic method. Another lady patient of 68 years suggested for being more positive. Another lady (age 35) suggested for Yoga. The subject again stated that more precise and specific process is needed. At this point of time the original doctor Dr. Suman Meyur IPGMER and SSKM Hospital was asked to join the forum and to suggest accordingly what the subject needed. He proposed to recall good moments of life. Now all the patients were asked to do as per advise but many of them found it difficult to recall at that moment as they all were stressed and not in a 'mood' for this. Joker again asked for other options to follow. There is silence for a while. Everybody except two male patients having oxygen support at that time eagerly involved searching options but nobody was able to search for more suitable options. It was a dead silence, a limit situation for the forum to proceed

further. Now Joker himself started singing the song 'We shall overcome'. The members of the group started moving towards the patients touching gently and inspiring them to join the song. A female patient (Age around 60) first cracked the ice and started crying. Another male patient (age 70), a retired officer of Government job took the guitar which he touched first time in life as he said later. He played the instrument with eyes full of tears. A male patient of 35 stated that he was used to with musical instruments and requested to give him the Daffli, a common rhythm instrument and started playing it while at that time he was with Oxygen support. He also was suffering from anxiety because his parents were admitted at a hospital. He was worried about not to meet again with them perhaps. Tear was flowing through his cheek while he played.

Another day at the Paschimbanga Rajya Pratibandhi Sammilani theatre production entered into the realm of politics and social crisis issues. One participant (M, 79) recited the poem Dui Bigha Jami (A land of two 0.2529 hectares) by Tagore and wanted to know wheather this could be a theatre. On his request it was decided to pursue the forum. The theme was created as follows, a Jamindar was about to build a palace but a piece of land of Upen, a peasant was a barrier to fulfill his wish as the land came across his needed plot. He requested Upen to sale the land but Upen refused. Jaminder threatened him at first and then finally rusticated Upen with the help of his personal goons. The peasant was compelled to leave and after a long time when he returned to his native place again and tried to have a mango from his own tree the police caught him. He was punished for theft from his own property. Forum as expected tried to relate the story to the class struggle but participants somehow felt lesser interest to discuss such subjects. In fact the theatrical production created no visible and striking impact on the group and we shifted from theatre to other forms. It was indeed a failure.

3.4. Drawing

Several patients with a range of 35 to 70 years put their effort in painting and some of them also used colour pencils for painting for a second time since their childhood. The age groups 60–70 and 70–80 showed maximum activity (more than 50% of the total participants). The group drawing was done through discussion. The face of the baby was covered by mask by the suggestion came from a male patient of 86. Another lady suggested to provide sanitizer

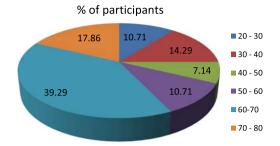


Fig. 4. Distribution of participation in drawing according to age group.

but that could not be included in the picture. Suddenly the discussion turned to a greater depth when participants started thinking beyond the present to an eternal future. The hands of care were equipped with food (a bunch of paddies) and education (book). During painting we found the same reaction of crying (Figs. 4, 5a–c, 6).

3.5. Creative writing

Three patients, one medical staff and two experimenters took part in poetry writing, although others were watching and helped providing concept. They formed the writing as described below.

We all wish to live happily	M, 79
We wish to see the world happy	M, 72
We wish render help to others in crisis	F, 45
We need our neighbours during crisis	M, 67
All of us want to be healthy	M, 39
We want to live blissfully in this	M, 70
beautiful world	

3.6. Music

Almost every patient was involved with music singing aloud, playing instrument or just clapping in rhythm. It was observed that in case of music where the age group of 30–40 was comparatively more active and age group of 70–80 expressed minimum activity (Fig. 7).

3.7. The feedback

The feedback from the participants was taken revealed that 90% of the participants experienced such kind of work for the first time in their life. 90% of the participants expressed their willingness to enjoy art exercise in future. 88% said that art therapy sessions were useful to change their overall wellbeing,



Fig. 5a-c. Participants engaged with group drawing at Athena.

2.38% said against it. All of them agreed that they felt comfortable with the artistic involvement (Fig. 8).

3.8. Statistical results

Pearson correlation coefficient (r) was calculated to test the significance of age group and number of participants. Positive correlation was detected between age group and number of participants regarding artistic engagement (r = 0.707; p value 0.1162). Positive correlation were observed between age group and number of participants with regard to drawing (r = 0.5237; P-value 0.2862), theatre (r = 0.1762; P-value 0.7384) while negative correlation were found with regard to music (r = -0.3024, P-value 0.5603).

4. Discussion

A single tiny organism of 120 nm in diameter and molecular weight of 40000 KDa has shattered the whole human society for almost two years. Each of us now feels to be a Robinson Crusoe searching for a Friday, a companion and not getting it. We are

searching solidarity but are compelled to live solitarily instead. Tremendous stress is mounted due to lockdown and social distancing as discussed earlier. In the present study fear of death and isolation were reported to be the most affecting factors followed by inadequacy of comfort, scarcity of O2, availability of health persons, inadequacy of health services. Such finding was in tune with Hall et al. [36], Polizzi et al. [37], and Jha and Jha, [38]. Psychological impacts of any pandemic were earlier discussed by Hawryluck et al. [39] (the loss of a loved one), Van Bortel et al. [40] (the loss of income), Ammar et al. [41] (decreasing satisfaction in life), Chtourou et al. [42], and Trabelsi et al. [43] (well-being associated with the experience of social isolation). The COVID-19 pandemic of has its uniqueness to create a social crisis of inequality, shortcomings [44], the economic and social crisis due to the government response [45, 46] or flawed policies [47]. All these factors both at the personal level and societal level lead people and the society as a whole to the stressed situation. In fact this is the uniqueness of the present pandemic situation where not only personal wellbeing is affected but the personal stress is interwoven with the social



Fig. 6. The group drawing created by patients at Athena safe home.

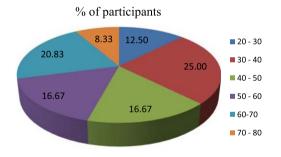


Fig. 7. Distribution of participation in music according to age group.

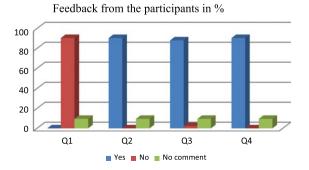


Fig. 8. Distribution of participation in response to questions of feedback.

factors. Therefore to address personal issues social factors causing stress must need to be taken also into consideration.

Now, stress causes anxiety, depression, reduce resilience may even leads to organ damage. Therefore it can also be inferred other way that increasing resilience surely can able to reduce stress. The present investigation tried to involve art therapy to increase resilience and reduce stress providing the sense of solidarity and optimism using art and performances. Generally, group art therapy can reduce feelings of isolation, build relationships, and increase communication through the shared process of creating and talking about artwork together [48]. Therefore more emphasis was given to group performances. The most active participation was observed in the age group of 60-70 and the lowest resulted in the age group of 20-30 (Fig. 3). It should be kept in mind that this group was consisted mainly of the treatment team members and they had to attend other official and medical activities even during the sessions. Therefore they discontinued the sessions frequently. However, results showed that they took active part in drawing and music therapy but as theatrical activity needed more group discussion as well as continuous attachment they could not follow the discussion and lost the interest.

In the present study, drawing therapy proved to be the most accepted form in case of COVID-19 patients followed by group song and theatre. Perhaps patients could not afford the physical exhaustion other forms like theatre needed while drawing a picture or singing in a group needed much less effort. Drawing in such experiments is not just a product but a process of production which also was equally important to observe and analyze [49, 50]. At the same time "the core of the creative process is the translation of the unconscious primitive impulses and fantasies into tangible forms in the present, using art materials" [51] and the creative process allowed expression of emotions like the illness, medical situation, relationships with the society [35]. Thus selection of objects, themes and use of colours etc. reflect the latent psychodynamics of the person. In the present study the group art showed a child resembling Lord Krishna at his childhood while he was raised by Mother Yashoda, his foster mother who took care of the child and protected him from the anger and several attacks by King Kangsa, the ruler who wished to kill him. This concept perhaps symbolized the growing up of a child at difficult situation not by his own parents but by other people. Worthy to mention here that during session

a female participant cried out of the feeling of joyfulness as she felt that some outsiders took care of her and talked about something positive. At the top of the picture Satyam, Shivam, Sundram were written. "In our Vedas, Upnishads, Epics and Puranas, the supreme values are quoted as Satyam, Shivam, Sundram. It simply means truth, godliness and beauty. Satyam Shivam Sundram are the core values from where, togetherness, love, peace, satisfaction, appreciation for beauty and aesthetics, caring, happiness etc. flow" [52]. The word 'Om' was on the head of the child which again pointed out the divine blessing over the child symbolizing here as future generation. This part of the drawing was created by the lady who prescribed prayer as a method of resilience in case of theatre session. Her religious faith and belief was clearly echoed here also. The child was protected with a mask of blue colour signifying the measure for COVID-19 care. Books and a bunch of paddies were given to the caring hands denoting the food and education for the next generation. So overall the entire group art reflected hope, care and optimism.

The use of music was not self-selected but imposed on the participants due to shortage of time. The effect of music (in this case song) depends on both lyrical and tonal elements. The lyrics of both the songs conveyed the feeling of freedom, togetherness, faith and other positive senses. Both the songs were mainly on major notes. The songs were rhythmic and tempo was moderate fast. Association of fast major was reported earlier with arousal of positive emotions across space and time [53–55].

Exercise of theatre apparently drew lesser interest in comparison to other forms like drawing or music. But this was not due to the failure of the method itself rather during practice two factors appeared which actually hindered the affectivity of theatre. Firstly the workers had to wear PPE kit for their own safety which produced a barrier to visualize the facial or bodily expression as well as it obstructed to listen properly the dialogues. Secondly most of the participants were elderly people and a few of them were with O₂ support. Therefore they could not provide the energy and effort needed for active participation. The interesting finding was that the forum discussion related to sociopolitical issues failed to draw much attention. Rather the participants were more interested in the issues related to COVID-19 such as human touch, sympathy, precautionary measures, treatment, etc.

In the present creative writing session the words used were 'happily', 'help', 'healthy', 'blissfully'

'beautiful world'. Expressing positive emotions in writing can help to draw attention to the positive side of a situation, help in discovering the positive significance of that event, and improving their emotional-regulation ability and leads to improvements in mental flexibility and the ability to handle stress [56-58]. They expressed their desire to have neighbours with them during crisis. It was evident during lockdown that several incidents took place where people remained reluctant or even showed extreme selfishness [59-61]. Under these circumstances this yearning was a justly expectation which found the way through pen and paper. Moreover all of them said 'WE' instead of 'I'. When asked they replied that nobody can live alone in the society and to live personally better means the better life of the human race as a whole. Such coping strategy was supported by Polizzi et al., who stated: "We delineate multiple coping strategies (e.g., behavioral activation, acceptance-based coping, mindfulness practice, loving-kindness practices) geared to decrease stress and promote resilience and recovery. These strategies may be especially effective because they help individuals make meaning, build distress tolerance, increase social support, foster a view of our deep human interconnectedness, and take goal-directed value-driven actions in midst of the COVID-19 pandemic" [37].

The statistical interpretation suggested that drawing and theatre therapy were more suitable for older patients rather than music therapy. But the researchers believe that data required for more elaborate statistical findings was insufficient. More detailed work was needed which could not be performed. Still as a pioneer study it could shine a light on the issue.

Mostly the behavioural manifestation was crying, as stated earlier. Essence of their explanation behind this they expressed, was that the relief from the hyper alert system they had been following for last several days of their illness. They also found people from 'outside' who expressed concern and cared for them after several days of 'exile'. At last they found the process of creativity through performing art and drawing and creative writing to be the way out to overcome stress. Moreover, they expressed that human concern for another human being was the best treatment ever. Hence cry was due to some 'unknown' delight and relief, they said. Although it should be mentioned that the research on emotional crying is still in its nascent stage [62], the current literature so far states that this type of cathartic crying expresses the mitigation or elimination of the tension caused by the inhibited manifestation of the feeling [63].

The feedback from the participants also revealed the meagreness of art therapy exercises in Kolkata. Only one male participant was not satisfied much with this kind of practice. His wife also admitted at the same safe home was suffering from other psychological problems. Therefore his entire focus was on her wife. Perhaps due to this additional stress he did not enjoy the sessions like other participants as it was not intended and designed for his particular stress.

5. Limitations

Usually therapy needs several sessions to accomplish the programme and analyze the results. However, in this study we hardly got a maximum of three sessions for a single patient. In most of the cases patients were either moved to other hospitals for better treatment or discharged. Secondly, due to such limited time and health condition of the patients it was difficult to measure the psychological assessment and thereby justifying the results statistically. Thus the work remained a qualitative pilot study. It was impossible to justify the effect of therapy considering medical parameters like weight gain, serum carbon dioxide content, phosphate levels [66]. Therefore the present study had to depend only on the verbal feedback from the subjects and analysis of drawings made by them. The study was observational in nature and not considered preintervention and postintervention comparison within the treated groups. Also, no control group was available for comparison. The study was short term and thus longitudinal follow-ups are needed to secure additional data. Theatre therapy is one of the most important therapies in case of increasing resilience but in case of COVID-19 it needs better experimental modelling which should be researched further in the future.

6. Conclusion

This was perhaps a pioneer attempt to promote art therapy in case of COVID-19 patients and the treatment team associated to them. During last almost two years COVID-19 caused isolation from the society and fear of death which placed people in front of existential crisis. During existential crisis people remain oriented to their own crisis, the crisis of existence. Additionally, people involved in occupation of treatment of COVID-19 faced severe burnout and stress [64, 65]. Therefore social, economic or political issues were not in primary focus. In fact the ability

to think critically is lost or hindered at least in such crisis. Such a situation not only causes sluggishness at individual level but the whole human race and humanity face unproductivity and stagnation or in extreme cases selfishness. But at the same time several reports of noble altruistic stances were reported at these perilous times as a sign of humanity. This study thus again pointed to the eternal fact that only human being can save humanity and restore the resilience power if it is called in a broader sense also. In this situation creativity can increase resilience and help people psychologically empowered to fight against any disaster. Such creativity can only be supplemented through artistic engagement. Moreover in the present study group work was observed to be most accepted than individual effort. Group work provides the platform for discussion i.e. interaction among each other which actually was restricted in isolation due to COVID-19. Therefore when people found a channel for interaction and discussion, they instantly accepted the route and participated accordingly. So now the time comes when everybody should provide channel of discussion and creativity to everybody. This is the need of humanity and need of time. On the basis of present work the following is recommended:

- 1. Art therapy is equally applicable to COVID-19 like other diseases.
- Each hospital or safe home should arrange such programmes at least twice a week.

Conflict of interest

There is no conflict of interest related to this study.

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References

- [1] Javed B, Sarwer A, Soto EB, Mashwani ZU. The coronavirus (COVID-19) pandemic's impact on mental health. The International Journal of Health Planning and Management. 2020;35(5):993-6. https://doi.org/10.1002/hpm. 3008.
- [2] WHO [https://www.who.int/]. Mental health & COVID-19. Available from: https://www.who.int/teams/mental-health-and-substance-use/covid-19
- [3] Yao H, Chen J-H, Xu Y-F. Patients with mental health disorders in the COVID-19 epidemic. Lancet Psychiatry. 2020;7(4):e21. https://doi.org/10.1016/S2215-0366(20) 30090-0.
- [4] Whiting K. World Economic Forum [https://www.we forum.org/]. An expert explains: How to help older people through the COVID-19 pandemic. [updated 2006 March 12; cited September 8]. Available from: https://www.weforum.org/agenda/2020/03/coronavirus-covid-19-elderly-older-people-health-risk/
- [5] Mudenda S, et al. Impact of the coronavirus disease on the mental health and physical activity of pharmacy students at the University of Zambia: A cross-sectional study. Int J Basic Clin Pharmacol. 2021;10(4):324-32.
- [6] Wang H, Xia Q, Xiong Z, Li Z, Xiang W, Yuan Y, et al. The psychological distress and coping styles in the early stages of the 2019 coronavirus disease (COVID19) epidemic in the general mainland Chinese population: A web-based survey. Hashimoto K, editor. PLoS One 2020;15(5):e0233410.
- [7] Tee ML, Tee CA, Anlacan JP, Aligam KJG, Reyes PWC, Kuruchittham V, et al. Psychological impact of COVID-19 pandemic in the Philippines. J Affect Disord. 2020;277: 379-91.
- [8] Waseem M, Aziz N, Arif M, Noor A, Mustafa M, Khalid Z. Impact of post-traumatic stress of COVID-19 on mental wellbeing of undergraduate medical students in Pakistan. Pak Armed Forces Med. 2020;70(1):S220-4.
- [9] Stuckey HL. The connection between art, healing, and public health: A review of current literature and nobel J. American Journal of Public Health. 2010;100(2):254-63.
- [10] Furnham A, Forey J. The attitudes, behaviors and beliefs of patients of conventional vs. complementary (alternative) medicine. J Clin Psychol. 1994;50(3):458-69.
- [11] Kendra C. Verywell mind [https://www.verywellmind.com/]. What Is Art Therapy? [cited 2021 September 8]. Available from: https://www.verywellmind.com/what-is-art-therapy-2795755.
- [12] Reed K, Cochran KL, Edelblute A, Manzanares D, Sinn H, Henry M, Moss M. Creative arts therapy as a potential intervention to prevent burnout and build resilience in health care professionals. AACN Advanced Critical Care. 2020; 31(2):2-13.
- [13] Petterson M. Music for healing: The creative arts program at the Ireland Cancer Center. Altern Ther Health Med. 2001; 7(1):88-9. PMID: 11191046.
- [14] Burns SJ, Harbuz MS, Hucklebridge F, Bunt L. A pilot study into the therapeutic effects of music therapy at a cancer help center. Altern Ther Health Med. 2001;7(1):48-57.

- [15] Daykin N, Bunt L, McClean S. Music and healing in cancer care: A survey of supportive care providers The Arts in Psychotherapy. 2006;33:402-13.
- [16] Mettner J. Creative medicine: Hospitals in the Twin Cities are turning to the arts to help heal the body and spirit. Minn Med. 2005;88(7):5-6.
- [17] Krout RE. Music listening to facilitate relaxation and promote wellness: Integrated aspects of our neurophysiological responses to music. Arts Psychother. 2006;34(2): 134-41.
- [18] Guillemin M. Embodying heart disease through drawings. Health (London). 2004;8(2):223-39.
- [19] Staricoff RL. Research report 36. Arts Council, England. [updated August 2004; cited 2021 September 8]. Available from https://www.creativenz.govt.nz/assets/ckeditor/attachments/1030/staricoff_r_arts_in_health.pdf?14102 35845.
- [20] Denisse E, Oliveira FD, Grubits S. The drawing in gestalttherapy: The versatility of the lines interfacing the clinical practice. Estud Pesqui Psicol. 2019;19(4):1036-50.
- [21] Vazquez DR, Alonso GR, Gurrola LCG, García RC, Martínez FR. Exploring convolutional neural networks architectures for the classification of hand-drawn shapes in learning therapy applications. Computación y Sistemas. 2020;24(4):1483-97. doi: 10.13053/CyS-24-4-3359
- [22] Carroll R. Finding the words to say it: The healing power of poetry. eCAM. 2005;2(2):161-72. doi:10.1093/ecam/ neh096
- [23] Shen L, Yang L, Zhang J, Zhang M. Benefits of expressive writing in reducing test anxiety: A randomized controlled trial in Chinese samples. PLoS ONE. 2018;13(2): e0191779. https://doi.org/10.1371/journal.pone.0191779.
- [24] Milbury K, Spelman A, Wood C, Matin SF, Tannir N, Jonasch E, Pisters L, Wei Q, and Cohen L. Randomized controlled trial of expressive writing for patients with renal cell carcinoma. J Clin Oncol. 2014;32:663-70. DOI: 10.1200/ JCO.2013.50.3532.
- [25] Martin L, Oepen R, Bauer K, Nottensteiner A, Mergheim K, Gruber H, Koch SC. Creative arts interventions for stress management and prevention-a systematic review. Behav Sci (Basel). 2018;8(2):28. doi: 10.3390/bs8020028. PMID: 29470435; PMCID: PMC5836011.
- [26] Parsons A, Omylinska-Thurston J, Karkou V, Harlowd J, Haslam S, Hobsonc J, Nairb K, Dubrow-Marshalla L, Thurston S, Griffin J. Arts for the blues a new creative psychological therapy for depression. British Journal of Guidance & Counselling. 2020;48(1):5-20. https://doi.org/10.1080/03069885.2019.1633459.
- [27] Bourassa KJ, Allen JJB, Mehl MR, and Sbarra DA. The impact of narrative expressive writing on heart rate, heart rate variability, and blood pressure following marital separation. Psychosom Med. 2017;79(6):697-705. doi:10.1097/ PSY.00000000000000475.
- [28] Ruddy R, Dent-Brown K. Drama therapy for schizophrenia or schizophrenia-like illnesses. Cochrane Database of Systematic Reviews. 2007;1. Art. No.: CD005378. DOI: 10.1002/14651858.CD005378.pub2.
- [29] Winnicott DW. Playing and reality. Basic Books: New York; 1971
- [30] Boal A. The rainbow of desire: The Boal method of theatre and therapy. London: Routledge, 1995.
- [31] Feniger-Schaal R, Orkibi H. Integrative systematic review of drama therapy intervention research. Psychology of Aesthetics, Creativity, and the Arts. 2020;14(1):68-80. https:// doi.org/10.1037/aca0000257

- [32] Rousseau C, Lacroix L, Singh A, Gauthier MF, Benoit M. Creative expression workshops in school: Prevention programs for immigrant and refugee children. Can Child Adolesc Psychiatr Rev. 2005;14(3):77-80.
- [33] Corbett BA, Qualls LR, Valencia B, Fecteau S-M, Swain DM. Peer-mediated theatrical engagement for improving reciprocal social interaction in autism spectrum disorder. Front Pediatr. 2014;10. https://doi.org/10.3389/fped.2014. 00110.
- [34] Boal A. Games for actors and Non-actors. Routledge: London. 1992.
- [35] Nainis N, Paice JA, Ratner J, Wirth JH, Lai J, Shott S. Relieving symptoms in cancer: Innovative use of art therapy. Journal of Pain and Symptom Management. 2006;31(2): 162-9. doi:10.1016/j.jpainsymman.2005.07.006.
- [36] Hall SE, Schubert E, Wilson SJ. The role of trait and state absorption in the enjoyment of music. PLoS ONE. 2016; 11(11):e0164029. doi:10.1371/journal.pone.0164029.
- [37] Polizzi C, Lynn SJ, Perry A. Stress and coping in the time of COVID-19: Pathways to resilience and recovery. Clinical Neuropsychiatry. 2020;17(2):59-62.
- [38] Jha AK, Jha R. ndia's response to COVID-19 crisis. The Indian Economic Journal. 2020;68(3):341-51. DOI: 10.11 77/0019466220976685 journals.sagepub.com/home/iej.
- [39] Hawryluck L, Gold W, Robinson S, Pogorski S, Galea S, Styra, R. SARS control and psychological effects of quarantine, Toronto, Canada. Emerg Infect Dis. 2005;11:354-5. doi: 10.3201/eid1102.040760.
- [40] Van Bortel T, Basnayake A, Wurie F, Jambai M, Koroma AS, Muana AT, et al. Psychosocial effects of an Ebola outbreak at individual, community and international levels. Bull World Health Organ. 2016;94:210-4. doi: 10.2471/ BLT.15.158543.
- [41] Ammar A, Chtourou H, Boukhris O, Trabelsi K, Masmoudi L, Brach M, et al. COVID-19 home confinement negatively impacts social participation and life satisfaction: A worldwide multicenter study. Int J Environ Res Public Health. 2020;17:6237. doi: 10.3390/ijerph17176237.
- [42] Chtourou H, Trabelsi K, H'mida C, Boukhris O, Glenn JM, Brach M, et al. Staying physically active during the quarantine and self-isolation period for controlling and mitigating the COVID-19 pandemic: A systematic overview of the literature. Front Psychol. 2020;11:1708. doi: 10.3389/fpsyg.2020.01708.
- [43] Trabelsi K, Ammar A, Masmoudi L, Boukhris O, Chtourou H, Bouaziz B, et al. Globally altered sleep patterns and physical activity levels by confinement in 5056 individuals: ECLB COVID-19 international online survey. Biol Sport. 2021;38:495-506.
- [44] Haase A. Covid-19 as a social crisis and justice challenge for cities. Front Sociol. 2020;5:583638. doi: 10.3389/fsoc. 2020.583638
- [45] Ghosh J. A critique of the Indian government's response to the COVID-19 pandemic. J Ind Bus Econ. 2020;47:519-30. https://doi.org/10.1007/s40812-020-00170-x.
- [46] The Lancet Editorial. India's COVID-19 emergency. 2021;397(8):1683.
- [47] Padma TV. Indian government should heed its scientists on COVID. Nature. 2021;593(6):9.
- [48] Jones JP, Walker MS, Masino Drass J, Kaimal G. Art therapy interventions for active duty service members with posttraumatic stress disorder and traumatic brain injury. Int J Art Ther. 2018;23(2):70-85.
- [49] Fyfe G, Law J, Eds. Picturing power: Visual depiction and social relations. London & New York: Routledge; 1988.

- [50] Guillemi M. Embodying heart disease through drawings. Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine. 2004;8(2):223-39. DOI: 10.1177/1363459304041071 1363-4593
- [51] McMurray M, Schwartz-Mirman O. Integration and working through in art therapy. The Arts in Psychotherapy. 2001;28:311-8.
- [52] Kaur KS, Shivam S. A need of the hour. International Journal of Science Technology and Management. 2017;6(3):47-50.
- [53] Kolchinsky A, Dhande N, Park K, Ahn Y-Y. The minor fall, the major lift: Inferring emotional valence of musical chords through lyrics. Royal Society Open Science. 2017;4(11):1-11. DOI: 10.1098/rsos.170952.
- [54] Lahdelma I, Eerola T. Single chords convey distinct emotional qualities to both naïve and expert listeners. Psychol. Music. 2014;44(1):37-54. DOI: 10.1177/03057356145 52006.
- [55] O'Hara T, Schuler N, Lu Y, Tamir D. Inferring chord sequence meanings via lyrics: Process and evaluation. In "ISMIR. 2012;463-8.
- [56] Wong CS, Chua MJ, Prihadi KD. Reducing depressive symptoms and increasing positive feelings with expressive writing. International Journal of Public Health Science. 2021;10(2):433-44. DOI: 10.11591/ijphs.v10i2.20797.
- [57] Kazdin AE, Blase SL, Kazdin AE, Blase SL. Interventions and models of their delivery to reduce the burden of mental illness reply to commentaries[J]. Perspectives on Psychological Science. 2011;6(6):507-10.
- [58] Ergene T. Effective interventions on test anxiety reduction: A meta-analysis [J]. School Psychology International. 2003; 24(3):313-28.
- [59] The Indian Express [https://indianexpress.com/]. N-24 Parganas: Man dies after being 'left unattended' at Bongaon hospital; 2020 [updated 2020 October 13; cited 2021 September 09] Available from https://indianexpress.com/ article/cities/kolkata/n-24-parganas-man-dies-after-being-left-unattended-at-bongaon-hospital-6525068/.
- [60] Chakraborty S. The Telegraph Online [https://www.telegraphindia.com/]. BDO, kin hit by COVID-19 bias in Arambagh. [updated 2020 July 20; cited 2021 September 09] Available from https://www.telegraphindia.com/west-bengal/coronavirus-pandemic-bdo-kin-hit-by-COVID-bias-in-arambagh/cid/1786804
- [61] Bhattacharya N. Altruism vs. Selfishness: A new interpretation of Tagore's Raktakarabi (Red Oleander). IOSR Journal of Humanities And Social Science (IOSR- JHSS). 2021; 26(3):48-57. DOI: 10.9790/0837-2603024857.
- [62] Bylsma LM, Gračanin A, Vingerhoets AD. A clinical practice review of crying research. Psychotherapy Theory Research & Practice. 2020;58(1):1-17. DOI: 10.1037/ pst0000342.
- [63] Miceli M, Castelfranchi C. Crying: Discussing its basic reasons and uses. New Ideas in Psychology. 2003;21:247-73. doi:10.1016/j.newideapsych.2003.09.001.
- [64] Pniak B, et al. Occupational burnout among active physiotherapists working in clinical hospitals during the COVID-19 pandemic in south-eastern poland. WORK. 2021;68(2): 285-95. DOI: 10.3233/WOR-203375.
- [65] Dogru-Huzmeli E, et al. Burnout and anxiety level of healthcare professionals during the COVID-19 pandemic in turkey. WORK. 2021;70(1):21-9. DOI: 10.3233/WOR-210028
- [66] Beck AT, Steer RA. Beck Anxiety Inventory Manual. San Antonio, TX: The Psychological Corporation Harcourt Brace & Company, 1993.