Tele-Yoga Therapy for Common Mental Health Disorders: Need for Assessment Tool and Guidelines

Abstract

Introduction: Tele-yoga is a cost-effective method of teaching yoga using cloud technology to relay from one source (trainer's venue) to multi-point video conferencing centers (participants' homes). However, there is a need to assess the tele-yoga trainer and the training itself to ensure safety and effectiveness. **Materials and Methods:** The Tele-Yoga Trainers Assessment (TYTA) tool was developed through (a) review of existing tools, (b) key informant interviews, and (c) validation by experts. It was tested for its feasibility in six persons with common mental disorders. A trained yoga therapist conducted tele-yoga therapy sessions which was webcast from NIMHANS Integrated Center for Yoga to NIMHANS Center for Well-Being for the first 15 days and to the respective homes of the participants using "*Skype*" in the remaining 15 days. Participants were assessed on (a) mental well-being, (b) satisfaction with overall health and were administered the (c) TYTA tool on the 1st, 15th, and 30th day. **Results:** The TYTA was easy to administer for assessing the performance of the yoga trainer. The qualitative case reports of individual participants depicted that over 30 days, mental well-being and satisfaction with overall health improved trainer's performance. **Conclusion:** Tele-yoga therapy is feasible with minimum technology and availability of good internet access at the relay and reception site. The trainer must be assessed for his/her suitability and be provided guidelines for achieving desired outcomes.

Keywords: *Common mental disorders, tele-yoga therapy, tele-yoga trainers assessment*

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Introduction

Tele-yoga is an alternative to yoga being provided face-to-face at a center; which helps eliminate the functional and social barriers of therapy.[1,2] It involves teaching yoga asanas, breathing practices/pranayama, and relaxation techniques using cloud technology to relay from one source (trainer's venue) to multipoint video conferencing centers (participants homes) using online software such as "Skype" and "Zoom". Research studies have shown that "Wii-Fit" (a Tele exercise gaming console) and home-based tele-yoga classes for conditions such as lower back pain,[3] stroke/heart failure,[4] and chronic obstructive pulmonary disease[5] have been found to be feasible, safe, appropriate, and acceptable as a form of therapy.

The COVID-19 pandemic has increased the number of people in the community suffering from stress-related mental health disorders. A number of yoga practitioners and schools of yoga have started using the tele yoga platform to reach out to their clients during the COVID-19 pandemic, a cost-effective method.[6] However, there is a need to assess the tele yoga trainer and the training itself to ensure safety and effectiveness.

Materials and Methods

For the development and feasibility testing of the Tele Yoga Training Assessment tool (TYTA), a nonfunded project was undertaken and approved by the Institutional Ethics Committee. Written informed consent was obtained from all the participants of the study. Ethical considerations of clients undergoing the Tele yoga therapy such as their privacy, safety, and confidentiality were explained to the participants.

Phase I: Development of Tele-Yoga Training Assessment Tool

- Step 1: Review of existing tools: We contacted Yoga Centers/Universities

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across India were to check if they were using any assessment tool to measure yoga training and its outcomes. Among the 43 centres/universities, 22 responded that although tele-yoga training was undertaken, there were no standardized assessment tools used to assess the training quality or the outcomes. Informal methods of rating yoga trainers on their yoga performance and teaching were collected from key informants of each of the institutes contacted

- Step 2: Key informant interviews: Healthy yoga practitioners and yoga trainers (8 each) who have been practicing/teaching yoga for more than 2 years and residing in and around Bangalore were approached for the key-informant interviews. After informed consent, the experts were asked to suggest any additions, deletions, or clubbing of items in the assessment tool based on the operational definitions of each of the categories

- Step 3: Validation: Nine experts with a minimum experience of 5 years in the field of yoga therapy after formal certification residing in and around Bangalore were independently approached to validate the TYTA tool

- Step 4: Data analysis for finalizing tool: (a) Ranking of the items using Lawshe's content validity ratio (CVR).[7] The CVR for each domain and sub-domain of the TYTA tool was calculated and a minimum CVR of 0.78 was considered for retaining a particular item in the tool. (b) The key informant interviews were process recording, coded, and content-analyzed. The decision of retaining, modifying, or rejecting items in the assessment tool was made by the research team after comparing the qualitative data obtained for the items with their CVR to develop the final tool.

Phase 2: Feasibility testing

- Sample: A total of six persons with Common Mental Health Disorders (International Statistical Classification of Diseases and Related Health Problems 10th Revision criteria) referred to NIMHANS Center for Well-Being (NCWB) and those who met the inclusion criteria were recruited to test the feasibility of TYTA tool

- Intervention: The participants were encouraged to attend physical yoga sessions at the NCWB on a particular time and day of the week for 15 days. A trained yoga therapist provided yoga training for a period of 30 days, which was web-cast from NIMHANS Integrated Center for Yoga to the NCWB for the first 15 days and to the respective homes of the participants for the remaining 15 days of the month using the software "Skype." The sessions were conducted in a group format based on the referral pattern for a period of 60 min. A video-CD with the yoga module was prepared and given to the participants to be used in case of technical disruptions during relay sessions and for their self-practice after

the duration of study. The tele-yoga practices included opening prayer, loosening practices, suryanamaskara, standing postures, sitting posture, prone postures, supine postures, kriya, pranayama, relaxation, and closing prayer (list of tele-yoga practices is available on request)

- Assessments: The TYTA tool, Warwick-Edinburgh Mental Well-being Scale (WEMWBS),[8] and Visual Analog Scale (VAS) were used to assess the overall satisfaction with the programme on day 1, day 15, and day 30 of the intervention. Detailed reports were obtained from the participants including their problem, why they chose Tele yoga, and what benefits they perceived from the intervention

- Data analysis: Individual evidence-based case reports were qualitatively content analyzed written to assess the feasibility of TYTA and tele yoga therapy.

Results

Phase 1: Development and validation

- The average age of the 16 experts who helped develop the checklist was 35.87 (9.49) years. They were educated for an average of 16.12 (1.02) years indicating postgraduate education and had 7.5 (6.6) years' experience in teaching/practice of yoga. All the experts were of Hindu religion, and half of them were females 8 (50%). Majority of them were yoga teachers 11 (68.8%) and only 5 (31.2%) were yoga practitioners

- The average age of the nine validators was 39.67 (4.58) years. They were educated for an average of 19 (2.915) years indicating a qualification of postgraduation and above and had 16.11 (6.772) years' experience in teaching/practice of yoga. All the experts were of Hindu religion and 6 (66.7%) among them were of male gender. Majority of them were yoga teachers 6 (66.7%) and only 3 (33.3%) were yoga researchers/scientists

- The final assessment TYTA tool was divided into four categories, namely (tool available on request from authors):

  1. "Instruction assessment" consisting of nine items: Knowledge and competency of anatomy, introduction of self and clarity, pace and delivery of instruction, precision of instructions, command over language, voice modulation/audibility, flow of instruction, and repetition of point of reference and confidence

  2. "Technique assessment" consisting of 11 items: Demonstration, relaxation, observation, alignment and correction, awareness during and after practice, suggestion of alternate postures, plan and structure, co-ordination of breath with movements, gaze during asana, time management, and effortless delivery

  3. "Inter-personal Assessment" consisting of 10 items: Compassion, patience, being firm but not forceful, conduct, knowing the history of participants,

constant feedback, personal attention, motivation ability, interactiveness, and approachability

4. "Program assessment" consisting 12 items: Pace of teaching (simple to complex), effectiveness of program, clarity and simplicity of material and program, quality of technical infrastructure, quality of teacher, length of program, satisfaction with the program, program take away, program recommendation, holistic program, ambience, and overall experience

- The TYTA was designed to be rated by three stakeholders: (a) Participant, b) external observer, and (c) self-rated by trainer to further reduce bias. Once the tool was finalized, it was tested for its applicability on all the three stakeholders. The internal consistency for the TYTA between all the three stakeholders was 0.80.

Phase 2: Feasibility testing using evidence-based case studies

- Over the period of 30 days, three participants completed the 1-month tele-yoga therapy sessions
- Case 1: Mr. X, a 60-year-old male visited the NCWB with complaints of irritability, sleep and appetite disturbances, and feelings of restlessness for the last 6 months. The participant reported stressors due to his work. A detailed assessment of Mr. X revealed a well-being score of 48, and a VAS score of 3 indicating poor satisfaction with his overall health. At the end of the 4 weeks of tele-yoga intervention, his well-being score was 53 and the VAS score improved to 10. He reported improvement in his sleep and appetite. He initially had to be trained to use technology to relay the sessions through "skype" as it was new to him. He later reported that he was enjoying doing yoga through the Tele platform as he did not have to depend on his children for travelling to the yoga center. He also reported he was feeling calm, energetic, and positive post the yoga intervention
- Case 2: Ms. A, a 23-year-old female was a known case of depressive disorder with chief complaints of excessive worries, feeling hopelessness, helplessness, lethargy, and a loss of interest in life. She reported the precipitating factors because of relocation from her village to the city and the inability to get a job. She also had low self-esteem and confidence. Ms. A had a well-being score of 35 and VAS of 2.5 at the baseline. At the end of the 4 weeks of tele-yoga intervention, her well-being score was 41 and the VAS score had improved to 9. She also reported feeling light and active physically, with better quality of sleep and feeling of confidence mentally. She felt motivated to continue yoga along with her medications as part of her lifestyle
- Case 3: Ms. Q, a 37-year-old female working professional with mild-moderate depression accompanied by symptoms of increased work stress,

worthlessness, irregular menstrual cycle, increasing weight, and hypothyroidism. She had a well-being score (WEMWBS) of 43 and VAS of 7 at the baseline. By the end of 4 weeks, the participant had scores of 49 and 9.5 in well-being scale and VAS, respectively. She was able to concentrate better at work and felt relaxed both physically and mentally. Her sleep had improved and she had lost weight. She was happy that she could join the tele sessions from anywhere even on working days reducing her logistic barriers to practice yoga. She rescheduled her work meetings to accommodate the tele-yoga sessions

- Apart from improvement in most of the domains of the TYTA, the overall median (range) scores of the TYTA improved from 160.0 (15.0) to 165.0 (7.0) indicating that the tele-yoga training was better delivered over the period of the study.

Discussion

Tele-yoga therapy for persons with mental health disorders can have a number of advantages, including reducing social stigma of coming to attend a yoga session in a mental health center and reduction in distance to travel and time. Ethical considerations of privacy, safety of participants, informed consent, and confidentiality, however, should be looked into before starting any tele-yoga sessions. In this regard, the TYTA was found to be a good tool to understand the quality of tele-yoga delivery. The present study showed that with minimum technology, i.e., laptop camera, speakers and in-built laptop mike, and the tele-yoga sessions could be successfully conducted.[9]

Most participants were not familiar with using the tele platform and hence had to be taught to register and log in to use the software. This could be more challenging, especially in semi-urban and rural settings, where technology has not made full inroads. Hence, participants need to be familiarized with the use of Tele technology before such sessions, so that the overall quality of the yoga sessions does not suffer due to lack of technological know-how. Development of tele-yoga Apps could possibly be of help in this direction.

With respect to yoga training, while the practices and Asanas were conveyed easily through Tele technology, subtler aspects such as Pranayama were challenging to be taught over the Tele space for the trainer. The complexity in learning pranayama has been emphasized by yoga texts and is advised to be done after a certain level of expertise gained with asana practice.[10,11] Hence, tele yoga therapy should be implemented initially under the guidance of a trained instructor and under medical supervision. Another option to make Tele yoga sessions feasible is also to train the caregivers in the yoga programme, and partner with them to teach the practices to the participants. Alternatively, to provide one-to-one contact sessions initially to convey the subtler aspects of practice and then conduct sessions over a Tele platform.

Although this tool was developed and tested just before the start of the COVID-19 pandemic, it has significant implications for tele-yoga therapy practice during COVID-19 pandemic and post lockdown. Practice guidelines including assessment of the tele-yoga trainer for conducting tele yoga therapy need to be developed and adhered to so that safe and effective practice of yoga using the tele medium is ensured.

Conclusion

Tele-yoga is a feasible method of providing yoga therapy services. However, yoga therapists may need specific training and also need to be assessed for their ability to provide adequate quality tele-yoga practices. The TYTA seems to be a valid tool to assess the quality of delivery of tele-yoga therapy sessions.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patients have given their consent for their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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