

STUDYING EFFICACY OF THE YOGA THERAPY: INDIVIDUAL CENTRIC APPROACH

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ABSTRACT - Research in Yoga Therapy is largely focussed on studying the benefits of a fixed intervention commonly for all the participants. Though the subjects may be homogeneous in several aspects, in training, each and every one may not have the ability to do the practices at the expected level. Similarly, all the practices may not be appropriate for the subjects. At the constitutional level, each person is unique in body structure, attitudes and mental status. This paper is an effort to evolve an individualised methodology while maintaining the rationale of commonality of yoga practices. To examine the feasibility of individualised methodology in yoga therapy studies. Also to discover the basis and practicability of such an individualised approach.

KEY WORDS : Individualised studies, Specific intervention, Dosage of yoga, Sub-class of practices

1. INTRODUCTION

The customary pattern of the Randomised Controlled Trials(RCTs) in yoga therapy is to employ a set of yoga techniques on homogeneous group of subjects with the common health conditions. Evaluation of a scientific study is invoking a standardised protocol. There is an abundant body of research work in yoga proving the effectiveness of yoga in an ailment or other, through RCTs, where a set of yogic practices are uniformly deployed on the experimental subjects. The trend is that all the participants go through the rituals and resultant findings which pave the way for anointing those practices as the most effective therapeutic intervention for a particular health condition.

During the experimental period the subjects are given the medications prescribed as per the individual requirements. The accepted norm is, all the subjects need not be given the same medication but can be exposed to similar generic class of drugs. Additionally one must note that the potency as well as the frequency of drug administered is in accordance with the individual requirements. Thus, the medical intervention is completely on a personalised basis. The trials for yoga therapy is on the premise, 'one size fits all' principle deploying a pre-determined set of techniques. This, thrust on the experimental subjects in the garb of maintaining uniformity of yoga therapy intervention as an essential requirement for a scientific study. It is necessary that in a methodical study of the effects of yoga therapy, the intervention needs to be administered by varying potency

specific to the individual. Secondly, a systematic study warrants and the yoga therapy techniques need to be classified on a generic basis, so that, alternatives are available to satisfy the vital aspects of the appropriateness and suitability. Otherwise, the findings can only reflect the influence of certain yoga techniques on the subjects who possess the ability to do the practices selected for the study. Also, such a study can project the outcome of common yoga practices in the experimental subjects with personalised medications.

2. NEED FOR SPECIFICITY

Practice of yoga bestows one or the other wellness factors is universally recognised. The above broad spectrum benefits would anyway accrue in RCTs. In the circumstances, it is necessary to eliminate this latent positive influence in a structured study. By deploying the generalised common practices for a particular health condition in the guise of uniformity and validation with regard to specificity of yoga practices is lost. The effort at the best is termed as an attempt to award labels and establish standardised yoga protocols for specific conditions.

Yoga therapy is not limited to a set of pre-determined group of techniques. There are broadband tools.

Moreover, the results in a yoga study do not merely project the outcome of bio-chemical interactions in a passive participant. The subject plays an active part during the term of study. In this context, it must noted that a yoga study is dealing with influences of unfathomable factors like prana and mind, which are not yet within the realms of definitive science. A methodical study needs to be precise and much more reliability is essential in establishing influences concerning health and wellbeing.

3. WHY INDIVIDUALISED STUDIES

Consider a group of healthy individuals participating in a yoga program as a fitness activity, assuming to be homogeneous in all aspects. All are not blessed with identical constitutional make up to do the practices at the expected level. Even a casual observation of the sessions would reveal that some of the participants will be able to replicate what is taught. Many of the participants would be struggling to attain the goal posture or practice, while a few give up

without even attempting. One can very well imagine the scenario in a group comprising subjects with ailments.

There is enough scientific evidence to prove that the effects of a particular illness is not the same in all persons. Manifestation of symptoms and complications varies according to the inherent constitutional composition of each individual. Medical science recognises that most health conditions bear a psycho-somatic undercurrent and mind has a significant role to play in nurturing one from illness to wellness. Primarily, yoga seeks to invoke the dynamics of the interplay in the integrated circuit of mind, body and breath. Limiting yoga therapy to a set of techniques would mean that they are chosen to gloss over the intrinsic potentialities of rich set of tools that are available in yoga therapy. Obviously, studying effects of yoga therapy requires a overhaul to circumvent the aforesaid incongruence. Research in yoga therapy should certainly migrate closer to reality of therapeutic settings and cannot blindly adopt the pattern prevalent in efficacy of drug studies. A pragmatic move to be incorporated in the study, the yoga practices that are classified on functional basis. Thereby, a broadband of techniques within the same genre can be grouped as a unit, to facilitate wider choice for individualisation without compromising on uniformity of functional effect.

4. BASIS FOR PERSONALISED APPROACH

Patanjali's Yoga Sutras enunciate in the following verse the principles of application of yoga :

"Tasya bhumisu viniyogah" - Yoga Sutra III.6

'tasya' -that/according; *'bhumisu'* -capacity or level or stages;

'viniyoga' - giving out, sharing, distributing, applying or employing

It implies that application of yoga needs to be appropriate to the individual. The most important aspect of 'viniyoga' is giving out appropriate to one's need. Incidentally, this very terminology is currently in usage to describe individualised yoga applications. The celebrated Yogacharya Krishnamacharya propagated this unique methodology of application. The great master who placed abundant faith in orthodox texts and diligently followed ancient teachings held that, yoga is always meant to be adapted to suit the individual be it therapy or otherwise. He believed that it is incumbent upon the teacher to make most of its versatility and scope.

Ayurveda, considered to be a cousin of Yoga, prescribes 'Dinacharya', the daily activities one is supposed to observe to lead a healthy life. The regulations clearly state that one's lifestyle and food habits have to be '*hitam*' (appropriate) and '*mitam*' (just as much needed) according to one's constitution. Thus, the yoga practices that constitute a part of one's lifestyle have to be appropriate.

Ancient text 'Yoga Rahasya' amplifies the cause of individualised practice especially in the context of illness:

"dehabhedat desabhedat vrttibhedacca naikadha

rtubhedacca jayante rogassangena sarvada" Yoga

Rahasya, I.24

Due to the many types of differences in body structure, place of residence, avocations and changing seasons, diseases arise in humans as a result of association.

"This sloka emphasises importance of individualised application of yoga by taking into account the person's body, the place of practice, occupation and also variations of the seasons. Yoga will not yield its best benefits if these aspects are not taken into consideration." (Nathamuni's Yoga Rahasya, Krishnamacharya Yoga Mandiram, p.39).

Yoga texts reiterate the fact that all practices are not suitable for everyone. As per ancient wisdom, therapeutic approach has to be fundamentally individual centric. Therefore, yoga therapy efficacy studies must be devised to incorporate this vital aspect. When certain pre-conceived practices are imposed without considering the ability, age, health condition, medical history etc. of a person there is a possibility of causing harm. This leads to creation of yet another type of health problem viz., Yoga injury, which is quite unfortunate.

5. INDIVIDUALISED METHODOLOGY

In the bygone days, yoga was taught duly considering the individual constitution and immediate day to day living environment. Yoga Rahasya clearly delineates the methodology to be observed by a teacher in individualised application of yoga :

"kala desa vayo vritti saktir vikshya vicaranat; yoga prayogam kurvita

jnani, mouni, jitatmavan" "Yoga Rahasya" I.30

A teacher must enquire, time and place of practice, age, occupation, ability of the individual, thereafter, reflect in silence with a detached state of mind before adapting yoga practices. A thorough holistic assessment of a person is a preliminary pre-requisite.

Modern medicine acknowledges the fact that any variations in the health of an individual has a profound impact on the state of mind. Given pressures of modern day life, 'psycho-somatic' connection is even more intensified which plays a significant part in containing the vagaries of an illness. The vital role of psyche in the healing process cannot be glossed over. As per the Yoga Sutra I.2, the very definition of yoga is 'cessation of mental fluctuation'. In the verse I.30, Patanjali lists the sickness as one among the nine obstacles that one encounters. Evidently, respecting this 'psycho-

somatic' connection is indeed an essential requirement in a yoga therapy intervention. Mind stuff is referred as '*chitta*', is a fascinating organ of the yogic constitution. Great seers of yogic lore explored the mind apparatus and its modifications. No doubt, the Ayurveda notably enlists a blissful state of mind, as one of the noble virtues that signifies the absence of disease. Sage Vyasa in his commentary on the Yoga Sutras, classified the various states of mind as follows:

- Kshipta or distracted
- Mudha or infatuated
- Vikshipta or occasionally steady
- Ekagra or one-pointed
- Niruddha or restrained

Therefore, in the light of the above position, a homogeneous group of subjects that comprise of individuals with the different states of mind accounting for their inherent limitations. In all fairness, it is vital that a yoga therapy study offers the intervention by distinguishing this facet.

There is an imperative need to recognise that each one tends to develop the uniqueness of constitution and personality in the process of growth which are considered in the medical intervention. This is largely influenced by the genetic factors, vocation, attitudes, environment and physical activity. In the therapeutic application of yoga getting a holistic view by examining these aspects is critical to develop the individualised practice.

6. PRACTICE PLAN

It is pertinent to refer to the principles of yoga practice presented by the acclaimed yoga guru and healer Desikachar, son of Krishnamacharya :

"The way we develop our session will depend on our immediate needs, our long-term goals, and what activities are going to follow our practice. A course of asanas designed to prepare the body for playing tennis will be different from one meant to help someone remain alert in a mentally taxing environment, and that will differ from a practice meant to help someone with chronic insomnia to relax deeply before going to bed." ('The heart of yoga: developing a personal practice' by Desikachar TKV, p.27).

In terms of the above statement it is obvious that one needs to assess a person in a comprehensive manner and prescribe a practice that is tailor-made to suit the individual in all the respects. Depending upon the soil and other conditions prevailing, a farmer decides the crop. Similarly, yoga practice has to be appropriate to the individual in all the respects.

7. STARTING POINT

In the RCTs the subjects are usually novices to yoga practices. In fact, in the most cases the population recruited would not have the opportunity of getting exposed to any form of exercise or occasion to examine their breath. One can very well visualise the situation, when such subjects are exposed to certain pre-determined set of practices identified as yoga intervention. A set of loosening exercises precede the specified yoga practices. Most of the time, beginners will do warm up practices at the expected level than the yoga intervention. A first time participant cannot perform postures or breathing practices precisely replicating the instructions. For the sake of uniformity, when yoga intervention is administered emphasising on achieving the form, participants who are not able to carry out the instructions tend to get de-motivated. Their further continuance in the trials only be an attitude of participation rather than any personal conviction or involvement. Mostly, this becomes one of the major reasons for the considerable volume of dropouts witnessed in the RCTs for yoga intervention. The reliability of a study can be enhanced by taking pro-active steps to prevent the above scenario. The crucial requirement is to get acquainted with the baseline condition of a participant by recognising one's abilities and limitations. The initiative is to ensure that the yoga therapy intervention duly acknowledges the basic status and accommodates the inherent characteristics.

Yoga therapy always commences from the point of the individual's stand. Any intervention in yoga therapy is a goal oriented and to mitigate hardship specific only to the help seeker. Moreover, yoga therapy is not a mere application of a technique. To produce the desired result, the yoga therapist has to establish a rapport with the help seeker. In certain conditions, it would also be vital to interact closely with the support group as well. Each individual is unique at all the levels. Manifestation of ill-health also occurs in a distinctive manner. Hence, persons with the same pathological findings need not have identical issues in the discomfort experienced. Further, in the most conditions when medications are administered to alleviate medical problems it could produce certain secondary issues that need to be considered.

It is essential to start the yoga therapy at a comfort level of the individual. Already one is experiencing the discomfort and to add more agony by way of unsuitable yoga practices would be against the fundamental principle 'Ahimsa'. It is critical to assess the appropriateness of the yoga therapy as a standalone practice or as an adjunct therapy. In order to conclude whether the practices suggested are appropriate, the therapist has to be guided by (i) ability and comfort level of the individual and (ii) suitability to reduce the suffering. Ultimate goal of yoga therapy is to remove any distortions and restore the equilibrium in wellness. To accomplish this, one cannot be guided by pre-conceived notions or practices. Key resources in enriching the yoga therapist is to develop the insights through the process of adhering self-practice. Therapist must proceed with the firm conviction that the

yoga practices must not only be appropriate but also suitably adapted appropriate to the needs of the individual.

8. ADAPTATION

Any intervention in yoga therapy cannot be simply thrust on the help seeker. The methodology of teaching yoga practices, legendary yoga guru Tirumalai Krishnamacharya firmly observed that, "Individual is not for Yoga, it is Yoga for individual". Traditional texts have enlisted a wide variety of practices, consisting of asana, pranayama, meditation, mudras, chants, breath ratios etc. The gamut of tools are available abundantly and these are further fortified when employed in the combination. It depends upon the therapist to make appropriate choices bringing forth the resources of experience and competence. Further, the practices chosen are usually classical in nature and requiring extensive preparation, which is ideal for learning by a normal person. In the context of dealing with infirmity or illness, there are several limitations in terms of capability and necessity. To illustrate, a help seeker may be reporting with the excruciating pain or another could be mentally agitated.

Does it mean, one has to wait for normalcy to return as the conditions are unsuitable to do the classical yoga practices. So far, as the yoga therapy is concerned, the techniques available for the acute conditions are aplenty by virtue of proper adaptations. Therefore, it is vital for the therapist to extract and employ only the functional aspect of the practices chosen. This would help and pave the way for simplifying the therapy needs and also facilitate ease of implementation by the help seeker.

Such a tailor made practice would be specifically catering to the needs of the individual. The underlying stance is that, one is already suffering and the path chosen to alleviate anguish has to be easily navigable. Conventional yoga practices constitute several steps involving repetitive practice to attain the perfection in form. Often these are time consuming and are not entirely necessary to satisfy the therapeutic needs. Whereas, the yoga therapy practices prescribed need to be for a short time frame to address the specific goals of the help seeker. Also, one must factor in the frame of mind is sickness. Complicated and time consuming practices will certainly de-motivate and depriving wholehearted involvement of the help seeker or forcing the people to quit. Role of the yoga therapist is to lay the road and monitor the journey. It is the potential already in the help seeker that is fortified and leading to one's healing through one's own faithful participation. Moreover, in a study it is critical to contain the factors which are leading to drop outs. Thus, the adaptation of practices provides the appropriateness, ease of practice, addressing the specific needs requiring short time frame and motivating one to pursue the journey.

9. PROGRESSION IN THERAPY

Therapist is obliged to evaluate the practices periodically as this provides the pathway to the progression. It is critical to verify whether the help seeker is in fact implementing the practice in the manner intended. Feedback provided by the individual is crucial in this regard. Also further progression in yoga therapy will be guided by the short term and long term goals of the therapeutic intervention. Once the acute phase is surmounted, the efforts will be directed towards sustaining the relief. Thereafter, the process of strengthening will be the road map.

According to the stage, dosage of yoga, intensity of the techniques prescribed need to be used. It would not be appropriate on the part of yoga therapist to confine oneself to a set of rigid pre-determined techniques and evaluate the efficacy of yoga therapy. This would amount to belittling the immense potentials of wide ranging yoga tools. In reality it reflects only the inadequacy of the therapist. Hence, the yoga therapist must be innovative enough to offer simple solutions appropriate to the needs of the help-seeker. Moreover, the periodical evaluation by the medical professional serves as an index of efficacy when the yoga therapy is offered in the complementary mode. This would go a long way in reinforcing the faith of help seeker and serve as a fillip to adhere to the practices over a long period of time.

10. DOSAGE OF YOGA INTERVENTION

Most often one notices that in RCTs to evaluate the yoga interventions, the study envisages the participants to adhere to a set of identified practices during the period of study. Each session of intervention will last 50 to 75 minutes. The participants are provided with assisted training for a few sessions, thereafter the subjects are required to do independent practices and report compliance. It would be interesting to note that even in case of persons enrolling for yoga as fitness activity, out of self motivation, each session would be around 50 minutes with the intermittent periods of rest. Sustaining the interest of subjects enrolled for health study around 50 minutes each session could be a tough ask. Indispensable is a favourably inclined mind set on the part of the subject.

In the given health condition it would be challenging to sustain the interest for more than 30 minutes. Particularly, one needs to visualise the situation when the participant completes the training and embarks upon independent practice. A wholehearted effort is expected from the subject to elicit a reliable result. In yoga study, the subjects are required to be active throughout the period of study unlike the passive participation in a drug trial. Generally, the span of attention would be anything between 20 to 30 minutes. Hence, the yoga intervention in the study needs to recognise this aspect. Ideally, the yoga intervention should not last more than 30 minutes per session. Longer duration of the sessions can lead to de-motivation resulting in drop outs,

which is already a bane in the yoga studies. In the present day living, demands on time is a big stressor and our effort must be in the direction of preventing yoga intervention to add on to this. Yoga intervention needs to be packaged as a short term intervention program with elements of objectivity according to the needs of the individual. This can sustain interest in the participant so as to give it a fair trial during the period of study.

11. LACK OF FOLLOW UP

Presently, we find that efficacy of yoga therapy studies are restricted to the pre-defined limited period. There is hardly any evidence of outcomes of long-term follow up. No doubt it is a nascent area of the study. It is the high time that effects of continuing yoga intervention need to be ascertained. Yoga therapy, as elaborated in the aforesaid paragraphs is an objective intervention. There are short-term and long-term goals as the targets of intervention besides the process is an evolving one. Even as the complementary therapy its impact - on the needs of medication, whether it facilitates in scaling down the potency or dosage of medication, role in containing secondary damages of a particular health condition, most importantly how it shapes the psyche of the individual with a problem etc. can be understood only through a long-term study.

Though the intervention addresses primarily the specified health condition, its outcome can permeate through the various layers of the constitution influencing the wellness factors. The roles of yoga intervention can be unearthed in myriad ways viz., capacity building in lifestyle conditions, post surgical recuperation, trauma, palliative care. To comprehend this, certainly an individualised approach is a plausible medium.

12. UNIFORMITY IN INTERVENTION

The indispensable goal of an experimental research study is to accomplish the standardised protocols of intervention with the eventual means of replication. To this end, the ingredients of intervention need to be

factored into the reducible units. Yoga therapy interventions can certainly satisfy these fundamental requirements of a dependable scientific study. This ancient has evolved in many traditions and many more are sprouting. Each tradition is identified with a set of distinctive practices. It is also common to notice that between the traditions, though the practices are identical they differ in nomenclature. Furthermore, it can also be seen that identical nomenclature assigned to different practices. Consequently, in such a diverse arena, one may get the impression that the yoga practices may not be suited for a scientific classification. As such, there is a possibility that most RCTs in yoga therapy

incorporate a pre-determined set of yoga interventions applicable across the board to all participants.

Largely, such protocols constitute the practices that are in vogue and universally adopted by the general populace for non-therapeutic purposes. No doubt the element of standardisation is secured by harnessing such practices into a rigid protocol. However, the vital aspect of implementation within the yoga therapy, the subjects is itself certainly compromised. Admittedly, one must recognise that the subjects are not only novices to yoga but also bear the vagaries of health condition. These inherent limitations may not always facilitate the standardised practice by each and every member in a study group. It would culminate into a setting where the results reflect the efficacy of a protocol implemented according to the best of each one's ability. In the circumstances, how can one envisage the replication. Validation of a scientific study also warrants that the results must reflect the effects of the chosen interventions at a uniform dosage among all participants. Presently, this is not wholly satisfied. Nevertheless, one can observe the positive outcomes largely attributable to the broad-spectrum benefits.

A paradigm shift in the research involving efficacy of Yoga therapy is vital. The standpoint must move from normative to individual perspective. Of course, without any disregard to the primary prerequisite of uniformity in intervention. The yoga therapy intervention employed in a study is with the objective of working on the specific areas of the human constitution. Hence, what is observed is the functional outcome of the intervention. This being the case, what if the units in the intervention are designed and classified on the functional basis. Thereby, for each unit within the specified class of intervention, it may be developed and fit in sub-class of units to accommodate the aspect of suitability and need of subjects. The sub-class will consist of standardised replacement options in case the subject is not able to practice the unit specified in the intervention. For eg., if a standing forward bending posture is classified to work on the abdominal region, may be provided for a sub-class of options wherein an obese person can be asked to do a half-way forward bend, while a person with stiffness may be encouraged to keep his knees bent and so on. Functionally, these options will fall within the same class but also facilitate the implementation by each one of the subject according to the limitations. This would also smoothen the process of replication. All said and done in case of pharmaceutical trial variations in potency and dosage is the accepted norms. Hence, a rational sub-class within a classified protocol for a given condition, is not alien to research.

13. STUDY TRENDS

Diorio et al¹ while evaluating the feasibility of individualised yoga for the inpatient children receiving the intensive chemotherapy in a pilot study, found it is feasible to conduct the individualised yoga for the inpatient children. Interestingly, identification of the effective intervention

toward reducing the fatigue and improving quality of life, is cited as an important step towards the end.

Diorio et al² developed an individualised yoga program promoting a standard approach to facilitate the evaluation and dissemination while allowing for the adaptability. Uniqueness of the program is tailoring each session to cater to accommodate the range of abilities and needs of the subjects while ensuring that the program can be conducted in the hospital setting.

Manincor et al³ studied the benefits of individualised yoga in reducing the Depression and Anxiety in a RCT. Finding is, Yoga plus regular care is effective in reducing the symptoms of depression compared with the regular care alone. A notable observation is that the individualized yoga may be particularly beneficial in the mental health care in the broader community.

Manincor et al⁴ established the consensus based recommendations for the yoga interventions for reducing the anxiety and depression. They adopted Delphi method to develop the consensus of experienced yoga teachers. General consensus achieved in the various parameters of practice (dosage of yoga) - average of 30 to 40 minutes, 5 times per week spread over 6 weeks. Notable outcome is that, while breath regulation and postures were considered important for people with depression; relaxation, breath regulation and meditation for people with anxiety.

Powell L et al⁵ realised the importance of individualised yoga program to meet the complex health and psychological needs of an individual with the Multiple Sclerosis.

Satish L et al⁶ analysed the role of individualised yoga practices as a self-management approach to achieve the glycemic control and psychological wellbeing among the Type II diabetic patients. After one-to-one individual sessions spread over 3 months, they observe that there is a significant reduction in fasting blood sugar and improvement in mood, concentration and quality of life. A distinctive feature of this study is that it is focussed entirely on providing one-to-one intervention and within a short period they are able to observe the notable positive responses through the yoga therapy intervention.

Holger Cramer et al⁷ is a meta-analysis of the dropout rates among the yoga groups in RCTs. A notable observation is that the dropout rate is higher in RCTs incorporating the yoga intervention of postures and meditation techniques than those without the said components. They found that 15-20% dropout rate is expected in a normal study but the rate could go beyond 40% depending upon the health condition. Dropout rate also increases when the intervention period increases from 8 to 12 weeks.

Kausthub⁸ emphasises that the yoga is an ancient science with deep rooted philosophy yet the efforts are in the direction of validating its efficacy through the modality of

modern medicine. It is further elucidated that the system of yoga has its orientation strongly towards the individual and all efforts to establish its credentials through the standardised protocols will be a gross understatement. It is opined that the classical teachings of yoga with the spiritual connect need to be protected so that the ancient system is not promoted as a mere fitness activity. Already there is a enough textual evidence citing the therapeutic benefits of yoga practices with the prominence on the individualisation.

Findings in almost all the above studies reveals that the yoga therapy intervention is effective and has to facilitate the individualisation according to the needs. There must be a scope for tweaking the yoga intervention to address the requirements so as to motivate the subjects to persist with the intervention. While the primary focus in choosing the yoga intervention addresses the chosen health condition, in the matter of imparting the intervention, it requires the skills and expertise of the yoga therapist. Instead of getting the feeling of 'also ran', the participants should be able to proceed with a sense of 'giving a fair trial'. For this to happen, the yoga intervention needs to be accommodative rather than sticking to a rigid protocol.

14. CONCLUSION

Research studies on the efficacy of yoga therapy either as an adjunct therapy or as a stand alone intervention needs to be pursued in encompassing the scope for individualisation. This could be achieved by developing the broad framework of a classified intervention for a given condition, with possibilities to have the options within the classification to meet the individual needs. Thus, uniformity is achieved by facilitating the evaluation in a systematic manner. Medical specialists world over hold the view that the need of the hour is the integrated approach in holistic health management. By studying the efficacy of yoga therapy in a most practical perspective let us hope to open up new vistas in the wellness management.

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