# **Research Article**

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# Attitude, knowledge and application of yogic sciences by physiotherapists

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#### **Abstract:**

#### **BACKGROUND:**

Yoga is a most valuable inheritance of the present. It offers a holistic approach to health. It is a form of mind – body fitness that involves a combination of poses, breathing techniques and meditation that have the potential to alter an individual's quality of life. With growing dissatisfaction with the conventional therapies, there is a pressing need for complementary measures and yoga seems to hold promise through its multifaceted approach to healing. Physiotherapists are beginning to recognize yoga as a form of treatment for many conditions.

#### **METHODOLOGY:**

A questionnaire based randomized cross-sectional survey of freshly passed physiotherapists was done. 76 students participated in the study. The questions assessed the knowledge, awareness, attitude and application of yoga in physiotherapy practice. The data was collected & recorded by percentage analysis method.

#### **RESULTS:**

34.21% intend to study yoga in future, 73.68% advocated only yogic postures for exercising, and 61.84% applied yoga in combination to other physiotherapy treatment. While 78.94% felt yoga drastically improved quality of life, 39.47% used wrong terminologies & 18.42% were unaware of the indications & contraindications the different yogic forms.

#### Conclusion:

The physiotherapists have a strong positive attitude towards yogic sciences. Yoga was used in different styles & with various impact & pace. Physiotherapists experienced that conducting yoga in combination to physiotherapy treatments (physio-yoga) greatly benefitted. But many of them used wrong jargons for naming asanas, also few were unaware regarding the conditions benefitting from yoga

**KEYWORDS:** Yogic sciences, Physiotherapy, Adjunct therapy, Awareness of yoga, Knowledge of yoga.

# **INTRODUCTION:**

Health presumes a sense of wellbeing. According to the National Accounts of Wellbeing, NEF, it is built up by the following parts<sup>1</sup>:

- Sense of individual vitality
- Undertaking meaningful, engaging activities that makes the individual feel important, competent and autonomous
- Inner resources or coping mechanisms that help us when things go wrong.

Yoga is a science by which an individual approaches the truth<sup>2</sup>. Yoga is an ancient exercise form which combines

physical training with a strive for mental & spiritual wellbeing. It is one of the 6 fundamental systems of indian thought collectively known as darsana. It has its origins in the Vedas, the oldest record of indian culture. Sage Patanjali in his book the Yoga Sutra systematized it as a special entity. Yoga is the ability to direct the mind without distractions or interruptions. Patanjali describes 3 principles of yoga:

1. Tapas – means by which we can keep ourselves healthy & clean inwardly. This is described as penance, mortification and strict diet achieved by practicing asanas & pranayama.

- 2. Svadhyaya investigation of self.
- 3. Isvarapranidhana expressing love of god by the quality of our actions<sup>3</sup>.

Thus, yoga works on all aspects of a person: physical, mental, emotional, psychic and spiritual. It is the science of right living intended to be incorporated in daily life<sup>4, 5</sup>. Stress (mental & physical) leading to pain, disability, misinformation & fear has been spreading like an epidemic today & showing no signs of abating inspite of advancement in research & technology in modern medicine & therapies. Yoga serves the part that states healing the mind heals the body, training the mind trains the body<sup>6</sup>.

Physiotherapy, according to World Confederation for Physical Therapy (WCPT) is a clinical health science that helps the clients to develop, maintain and restore maximum movement and functional ability throughout the lifespan. The use of evidence-based, natural methods such as exercise, motivation, adapted equipment; advocating and education are characteristic for the field of physiotherapy<sup>7</sup>

It is a health profession which deals physical impairments associated with movement disorder caused by injury, disease or health related condition that can interfere with ability to perform or pursue any activities that are important to them<sup>8</sup>. A Physiotherapist uses various therapeutic modalities to treat patients ranging from manual therapy to electro therapy<sup>9</sup>. Yoga as part of study is included in 1<sup>st</sup> year undergraduate syllabus for physiotherapy students by Maharashtra University of health sciences; which includes basics of yoga with 10 basic postures and their physiological effects<sup>10</sup>.

Since physiotherapists are not restricted to single method in their treatment approaches it was decided to find out the attitude, knowledge and the application of our ancient heritage by the freshly qualified physiotherapists in their practice.

# **METHODOLOGY:**

Approval of the Institutional ethics committee was obtained prior to study initiation. Fresh physiotherapy graduates & interns who recently passed out from esteemed colleges in Mumbai were recruited for the study. 76 therapists were selected randomly by coin toss method from a pool of 180. An informed consent was obtained from them prior to study commencement.

The interview was conducted with the use of a questionnaire, formulated from literature & included 23 questions that focused on areas of knowledge about yoga, different asanas, identification of asanas and their effects, pranayama, about use of yogic sciences in daily practice etc. A panel of experts was asked to discuss the

questionnaire, focusing on conciseness & appropriate content with regard to the subject area. 5 senior faculty members of 3 different departments of the hospital then validated it. It consisted of questions aimed to assess the physiotherapists' on-

- Outlook towards yoga: This part had 6 questions that assessed the understanding of yoga, its 8-fold path, different forms, whether it can be advocated to patients.
- Conception of yoga: These 10 questions were about asanas, pranayama, identification of different yogic postures, contraindications, indications etc. to evaluate their depth of knowledge about yoga.
- Benefits of yoga: The remaining 7 questions were based on the effects of yoga, stress busters, improvement in quality of life.

The questionnaire was subsequently handed out to the therapists to be completed in a time frame of 30 minutes. Each of them were requested o be frank & loyal to the answers written. The data was then collected & analyzed to assess the attitude, knowledge and application of yogic sciences by physiotherapists.

#### **RESULTS:**

It was noted that the physiotherapists were very enthusiastic about the topic of the study.

**Table 1**: Demographic data of the subjects participating in the study

Gender	No. of Physiotherapists
Male	27.63%
Female	72.36%

**Table 2:** Illustration of attitude of physiotherapists towards yoga

			Don't
Attitude about yoga	Yes	No	know
Attended yoga workshop	46.05%	53.94%	
Advocation of yoga by			
physiotherapists	73.68%	15.78%	10.52%
Study of yoga in future	65.78%	34.21%	

**Table 3:** Comprehension of yoga demonstrated by physiotherapists

Conception of yoga	Correct	Wrong	Don't know
Terminology	32.89%	39.47%	27.63%
Knowledge about yoga	42.10%	39.47%	18.42%

 Table 4: Application of yoga in daily life

			Don't
Benefits of yoga	Yes	No	know
Application of yoga	61.84%	19.73%	3.94%
Quality of life improvement			
with yoga	78.94%	7.89%	13.15%

# **DISCUSSION:**

Physical exercise can prevent & treat several illnesses just as good as medical descriptions. Physical activity is made part of the treatment based on the client's own goals and interests, and can be conducted individually or in groups9. In the meantime the physiotherapy profession stands at a crossroad and needs to some-what redefine itself. Nicholls and Larmer (2005) suggest in their paper Possible futures for physiotherapy that times are changing and the physiotherapists will face new challenges. The formerly health care professionalcentered services are becoming more patient-centered; issues related to training, health, trends and the rapidly growing use of technical equipment require new curricula and training programs. Due to increasingly diverse populations and future economic burdens, physiotherapy will need to integrate more with other health care related professions and areas bringing the strengths of physiotherapy practice into a more holistic approach to health<sup>10</sup>. A research carried out by the Australian Physiotherapy Association (APA, 2013) report similar findings. Their report states that in the future, due to a changing health need among the population, physiotherapy needs to be able to provide a broader range of services that are more in response to the consumers need<sup>11</sup>.

The practice of yoga is based on the following assumptions: complexity and multidimensionality, various positive influences on an individual's wholeness through the mind, body, and the relationships between them. These assumptions may have the potential to contribute towards the practice of physiotherapy and its underlying principles. The essence of physiotherapy as a multifaceted process requires teamwork and efforts of various specialists like psychologists, sociologists, occupational therapists and nurses if patients are to benefit. Ideally, the physiotherapist should possess knowledge from these areas of science in order to professionally care about patients. Therefore, it can be suggested that basic similarities exist between yoga and physiotherapy in terms of multidisciplinary and complexity of holistic care. Such conceptual enrichment may be a useful source of inspiration physiotherapists concerned about their patients' overall health on a daily basis<sup>12</sup>.

Also, Ebnezar et al found that an integrated approach of hatha yoga therapy is better than therapeutic exercises as an adjunct to transcutaneous electrical stimulation and ultrasound treatment in improving walking pain, range of knee flexion, walking time, tenderness, swelling, crepitus, and knee disability in patients with OA knees<sup>13</sup>. Physio-yoga is a relatively new phenomenon that has come to grow quite fast during the last years, especially among private practitioners in physiotherapy. Hence, this study was conceptualized to determine the attitude,

knowledge & application of yoga by freshly passed out physiotherapy graduates.

Table 1 shows the demographic data which is self-expolanatory.

Physiotherapists had a very enthusiastic attitude over inclusion of yogic sciences in their treatment protocol. 73.68% had already been advocating this in their patient management practice. 46.05% made it a point to attend yoga workshops, seminars, conferences conducted over a period of time. Some of them even practiced yoga themselves. This is illustrated in Table 2.

Even though therapists use yoga, Table 3 demonstrates that upto 39.47% utter wrong terminologies for different yoga techniques while 27.63% just perform the various postures as exercises without knowing that they are asanas. This can be due to the confusing & ancient nomenclature used in describing asanas. Also, the different rules followed can be difficult to set to memory. Thus, many of them prescribe asanas as exercises without knowing the actual names & protocols.

Even with this, many have realized that, depending on the situation; physiotherapists may choose different approaches to reach the goals set at the therapy planning stage. The paths chosen might vary, but the main goals are always the same; restore or if possible improve function, eliminate or reduce pain and discomfort, prevent further injuries and encourage promoting behavior. This leads us on to the client perspective and the question about motivating and making the physiotherapy attractive. Table 4 shows 78.94% observed that, practicing yoga leads to a greater satisfaction with life. Improvements in interpersonal relationships are described, as well as greater satisfaction and happiness on a personal level. Yoga is not merely working out or relaxing; it is seen as a life style, creating interest to engage in health promoting activities, healthier nutritional choices and experienced of an improved quality of life. Yoga was chosen by 61.84% for its many benefits on various different levels of the human experience of wellness. The increased body awareness and internal locus of control. The inner involvement, increased feeling of control and mastering of the own body described by the respondents seems to result in coping strategies used to both prevent and treat pain, discomfort and stress. Also on a social level, participating in a yoga class group brings advantages to the respondents. It is also observed that 13.51% use yoga but are still not aware of its benefits.

#### **CONCLUSION:**

Researchers, physiotherapists and their patients as well as yoga practitioners can obtain valuable and additional

arguments through the cross-fertilization of ideas across presented studies united by shared, underlying concepts. Physiotherapists have a comprehensive anatomical and physiological knowledge and know-how needed to choose asanas and positions to best fit the purpose and the client's need. These asanas could be taught and trained together with the client individually or in groups. Perhaps prescribing specific yoga asanas and physiotherapy on medical description along with recommendations physical activity for clients experiencing stress, pain and discomfort could be an upcoming trend. More physiotherapists should be encouraged to attend yoga workshops, do self-practice, un-fold new dimensions for physio-yoga in the near future.

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