

**A CRITICAL REVIEW STUDY ON SIGNIFICANCE OF ANATOMICAL KNOWLEDGE IN YOGA EDUCATION FOR MANAGEMENT OF LIFESTYLE DISORDERS IN SOCIETY**

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Article Received on  
16 August 2017,

Revised on 05 Sept. 2017,  
Accepted on 26 Sept. 2017

DOI: 10.20959/wjpr201712-9734

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**ABSTRACT**

Yoga and *Ayurveda* are the science of life which deals with physical as well as mental health of a human being. Yoga and *Ayurveda* these two are the indivisible parts of holistic living. *Ayurveda* and yoga together can not only benefit a person's all round health, but are also the reason for one form of treatment's success. But it is very important to understand how it can help you and why both their principles should be practiced together. Yoga and *Ayurveda* both sciences share virtually the same metaphysical anatomy and physiology, which consist of 72000 *Nadies*(subtile channels), seven main *Chakra*(energy centers), five *podily* sheaths and the

*Kundalini Shakti*(energy). Yoga is an enormous science and it has many levels to getting knowledge or practice in day to day life in our society. While practicing the yoga many individuals complain of knee or elbow pain, back pain etc. during or after Yoga process. The reason for this is that they do not understand their limitations and over stretch or exert their body structures like joints or muscles, which lead to injury. By appropriate anatomical knowledge of our body and its fundamental will help a lot in the yoga practice. It also helps to know which pose of yoga effects on which part or structure of the body. So fundamental knowledge about the anatomy of human body is very essential for the Yoga Education for Management of Lifestyle Disorders in Society

**KEYWORDS:** yoga, *Ayurveda*, anatomy, Lifestyle Disorders, Management.

## INTRODUCTION

The knowledge of yoga contains infinite potential to heal and prevent injury. Yoga is a powerful and productive tool. Every individual experience this in different ways, but there are many who have not yet experienced yoga at all. As an engaged yoga practitioner or teacher, like it or not, we are a representative of yoga to the wider world, to the yoga-curious, to the medical community and others. The positive effects of the practice are visible to others in how you explain the effect of yoga on different organs or structures of the body and how you sustain and create optimal health in your own body mind and spirit. While practicing the yoga, you will definitely be asked about the effect of yoga on various body parts, injuries, and whether certain poses are safe or contraindicated in which certain conditions. You will be communicating directly or indirectly to the society regarding the education or practice of the yoga processes Part of that communication is articulating in the common language of basic medical terminology that how you keep your body parts safe and healthy as well as how yoga can support any given individual's structural anatomy.

Teaching yoga as a career involves an investment of substantial energy. Everyone's trajectory is unique, but most likely you imagine yourself continuing to teach yoga a decade or three from now. Change is the only constant. Your body will change due to lifestyle modification. If you teach or practice Yoga for an adult population, and you teach them well with the help of basic and simple anatomical terminology and also explain them the effect of particular yoga process on meticulous body organs or parts than everyone will follow you (hopefully) for years and get knowledge of yoga along with yoga anatomy.

Yoga is the most important, beneficial, easily and cost effective therapy of ayurveda for cleansing of the body physically and spiritually. Yoga is a tool for uniting the mind and body, and it is important to know the basic structural knowledge of various body parts and physiology of the body for understanding the impact of different yoga procedures like *Dhyan*, *Dharana*, *Asana* etc. When one does yoga with correct alignment and anatomical reflection then it becomes easier to synchronize breath and mind with it. Anatomy is a medical subject dealing with the basic structures of the body. It includes knowledge of the bones, muscles, joints, blood vessels, nerves and organs within the body. All the above pointers are then used to determine the risks during yoga *Asana*. Risks during yoga *Asana* implies knowing the kind of injuries associated if an asana is not performed correctly. Knowledge about the joint

movements is particularly beneficial in guiding beginner students in avoiding injuries due to overexertion of a singular joint.

Having knowledge of the anatomy of the human body can make better education of yoga and an even better practice of yoga. As a yoga instructor you can be a help for people who need to train or need rehabilitation after pregnancies, ankle sprains, hip replacements, spinal deformities and dislocated shoulders and knees. Knowledge of anatomy will help you reassure these people and guide them towards rehabilitation and a better lifestyle. Even during yoga classes, beginner students are highly likely to twist their foot, fall on their face or pull a muscle or a nerve. If you know basic anatomy, you can quickly assess the problem area and help them temporarily relieve the problem.

It will be a part of your job to communicate the risks of yoga with your students, and reassure those regarding injuries and long term effects. It can also aide instructors in designing yoga routines for private and public classes. Private classes mostly target a particular part of the body or a specific injury (such as lumbar pain, back ache etc.) so knowing which *Asana* will benefit these conditions is vital for earning the confidence of your students.

### **Significance of Physio- anatomical knowledge in yoga**

Knowing the anatomy of the body is an added benefit if you are a yogi. It is vital to know which muscles and bones can sustain which type of injuries, which asana targets which muscle compartments and which poses are specific to healing on injuries. The contents of the body of a human being is not just muscles and bones, but also nerves, blood vessels, joints and organs. Being a yoga education or practice does not mean you have to know only knowledge of yoga. For appropriate education or practice of yoga one should know the basic terminology and structural anatomy of various body parts like abdominal organs, thoracic organs, sense organs, nervous system, musculoskeletal system major muscles, joints and bones as well the most common movements of the body.

The body has 206 bones, and these are divided into long and short bones. As a yogi in training, you only need to know the major bones of the body, such as those in the legs and arms. It is also important to know the structure of the spine, as it is – quite literally- the backbone of the skeleton. Having knowledge of bones will help aspiring yogis to know which *Asana* are applicable on which anatomical part of the body, and which bones are at risk of injury during yoga practice. With the bones, we should also learn the origin and insertions of

muscles to the bones. While these may seem daunting, students must remember that muscles are divided into compartments. Each Muscle is grouped according to the movements of body or in other words they are arranged according to function. Learning them in conjunction with the movements in *Asana* will give yogis a fair idea of who can benefit from these *Asana*, such as individual with shoulder dislocation problems must focus on the *Asana* which strengthen the muscles around the shoulder joint, because shoulder joint is vulnerable joint by its very structure and it is kept stable only by a strong muscular structure around it.

Yoga practice can either focus on one muscle compartment, or multiple ones at the same time. It is therefore important to know which muscles are being used in various yoga poses. Joints are the structural attachment between bones, and are most prone to injuries during yoga poses. It is important to know the movement of major joints (primarily the arms and legs), as well their degree of rotation. Joint movements such as flexion, extension and rotation allow yogis to determine which movements are safe in particular yoga poses. After studying the basic structures, yoga instructors have to know how the body incorporates these structures in basic movements. The basic movements include flexion, extension, external and internal rotation and so on. Shoulder blade or scapula has different kind of movement such as elevation, depression, protraction, retraction, medial rotation and lateral rotation. Students of Yoga must be familiar with these movements in order to learn the role of shoulder blade stability in performing different yoga poses. It is important to know the structures or body parts and movements involved in each yoga process, as one asana may involve multiple movements and effect on more than one body part of the body. Thus anatomical knowledge in yoga education or yoga practice builds up the body physically and mentally. There's a lot to learn about the human body and it's easy to get plagued. The biggest reason to discuss anatomy is to facilitate healthy practice and help to understand what's going on or change in the body during and after the yoga. Here are some key aspects of anatomy that are helpful to understand the significance of anatomy knowledge in yoga education or yoga practice like below.

### **Movements of the body**

Yoga is a practice of connecting movement to breathe in *Dhyan*, *Dharana*, *Pranayam* etc. "Movement" can be described in various ways, but in order to understand it from an anatomical perspective, we need to know the planes of the body and how moving different body parts creates actions such as flexion, extension, and internal and external rotation.

The aim isn't in understanding these movements in theory only but it's in applying them to different body parts and poses. Often in one pose, there can be 3 or more actions taking place simultaneously.

### **Bones of the body**

The body is comprised of 206 bones; there are 26 in the foot alone. While it might be your passion to understand and be able to name all 206, it may not be necessary in order for you to develop a baseline of understanding for teaching yoga. Certainly bones in the arms, legs, and torso are essential to know in order to understand the basic structure of the body. Also, knowing the names of the bones will come in handy as you start to review the origin and insertion of the major muscles.

### **Joints of the body**

We are familiar with yoga as a movement-based activity and we know the body is made up of bones, joints and muscles (among other parts). Joints are between bones and understanding the types of joints in each part of the body has important implications for the kinds of movements that are safe and handy and the kinds of movements that are more risky, especially depending on a basic anatomical knowledge, degree of strength and flexibility. There are several types of freely moveable joints (hinge, ball and socket, gliding, ellipsoid, pivot and saddle). The anatomical knowledge is helpful to understand each one and to identify some parts of the body where they appear.

### **The structure, composition and function of the spine**

The spine is the central axis of the body and as such, understanding its composition, function and surrounding muscles can help you in the presentation of poses as well as creating custom sequencing for students experiencing back pain, injury or chronic conditions. Start with its physical structure (bones, joints and discs) and work outwards (muscles, tendons and ligaments). Once you have a basic understanding the components of the body, its movements, and have reviewed key poses, you can begin to understand the kinds of movements that put the body at risk. For instance, understanding that the knee is a hinge joint helps us recognize that flexion and extension are healthier movements than taking the knee into flexion as you would see in a pose such as Pigeon (where the shin is moved to the side).

## DISCUSSION

Basic knowledge of anatomy is key point for the safety and development of yoga education or yoga practice. Integrating this knowledge can encourage injury prevention and facilitate the healing process. It can connect a deeper understanding of the philosophies in creating yoga sequences for public and private classes. For private classes, if there is a specific area of focus, then you can design a practice that addresses those concerns. An anatomical awareness also prepares you to take on students with injuries in a safe and effective manner. Using variations, props, and mindful sequencing to compliment this information can create an inclusive yoga class. An understanding of anatomy also gives you the tools to analyze your practice and teachings to create effective movement patterns. This encourages proper sequencing techniques that include adequate warm-ups and poses with appropriate counterpoises. It also reinforces the importance of alignment for the purpose of safety for our joints, muscles, tendons and ligaments rather than for an esthetic appeal. The patterns we create on our mat have the ability to affect how we progress outside of yoga, meaning that our muscle memory creates healthy habits to impact other activities in our daily lives. The evolution of yoga suggests that one day it can be utilized for rehabilitation in a clinical setting – perhaps a connection can be made between medical providers and the application of yoga as therapy. This is one of the many reasons anatomy should be part of the curriculum in any yoga teacher training. In teaching yoga, it is important to realize it is your awareness of anatomy that is useful to the practice.

Although an awareness of anatomy is important, some believe this gives more credibility to their teaching, therefore it's necessary to share. They want others to witness their knowledge even when it has no benefit to the student experience. It is also common for teachers to have a medical-model approach emphasizing the body without any regard for the holistic needs of the student. Introducing spirituality through breath and energetic awareness can encourage deep transformation. Turning inwards can be a powerful tool that goes beyond the physical, which opens the door to the deeper aspects of yoga. If the focus is merely on what's external, this connection is difficult if not impossible to find – it becomes dulled down to fitness without any space for growth. Although we want to encourage physical wellness for our students, we do not want to neglect holistic health and well-being. Using complex anatomical terms in public class settings creates confusion and alienates your students. Students will become confused in understanding the cue unless they have a background in anatomy and physiology. This makes the student feel inadequate and uncomfortable that they may not even

want to ask questions after class to avoid the potential embarrassment. There are questions to ask before adding that anatomical cue into your yoga sequence that does it beneficial for yoga education? Or am I saying this for better yoga practice. It is important to share the benefits of the practice so that everyone knows how to use yoga for improving their health, wellness, and comfort.

The modest use of simple anatomical terms can express these advantages, giving confidence as to why we practice certain aspects of yoga. To avoid excessive anatomy, try to focus on a few basic points with intentions that add to the experience. When it does prove to be useful in yoga education or yoga practice, it may also be necessary to explain where this area is located so there is no confusion. It is essential to reflect upon your intentions and re-evaluate when necessary. A lack of inclusive wording reveals ambivalence towards a supportive better relationship. Demeaning others in an attempt to reinforce your credibility goes against many of the values we want to embrace and instill in others. For better society health, the goal should be to elevate your anatomical knowledge by cultivating a healthy relationship between anatomical knowledge and yoga practice. By creating an inclusive environment the society feels confident in their ability to follow the yoga education or yoga practice. It is clear that anatomy and physiology have significant roles, specifically for teaching; however the emphasis should be on the experience of yoga as a whole. An understanding of anatomy can have a profound effect on your cueing, sequencing, alignment, safety, and inclusivity in your teaching as well as your own personal practice. Developing a healthy relationship with anatomy to refine your knowledge can benefit your teaching while creating a supportive learning environment for yoga. Thus, for the rapidly growing yoga community needs this essential anatomical knowledge of biomechanics, especially in yoga education or training programs. This article presents basic anatomical information in a progressive and conceptual sequence so that anatomical details should balance with the holistic perspective of yoga as an integrative, transformational lifelong practice in present and in upcoming era.

## CONCLUSION

Yoga is all about harmonizing the body with the mind and breath through the means of various *Pranayama* (breathing techniques), *Asana* (yoga postures) and *Dhyana* (meditation). Anatomical knowledge plays key role Yoga education or yoga practice in society to change their body and mind physically, mentally & spiritually. The earliest yoga scholar held the view that we actually possess three bodies: physical, astral, and causal.

From this perspective, yoga anatomy is the study of the subtle currents of energy that move through the layers, or “sheaths,” of those three bodies. The circumstance that yoga provides for the study of anatomy is rooted in the investigation of how the life force expresses itself through the movements of the body, breath, and mind. Knowing yoga anatomy is the foundation for physical safety, know the effect of yoga on different organs of the body upon which you can layer all the other goodness you know, intuit, and absorb while educating or practicing the yoga. Thus knowledge of Anatomy & Yoga practice is the ideal cohort for education of yoga practice, because it fills in knowledge gaps about the human body, biomechanics and systems in a holistic and integrated way.

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