EFFECT OF YOGA AND EXERCISE ON HEALTH: A REVIEW

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ABSTRACT
In 21st century everyone needs to fit and healthy. According to WHO (world health organisation) health may refer to complete physical and mental well-being. There are two things which can make a person healthy: - Yoga and Exercise. In this the suppression of all activity of body, minds and make them in order for distinction and liberations. It includes breathing control, meditation and adoption of specific portion of the body. By the yogic method person can obtained control on latent power and self-realization. In modern time, yoga is used for the medication and therapeutic purpose. It can help patients to reduce their medications and slow down the disease spread. It also helps to maintain the body activity and enhanced the physical activity of a person. Improve strength and growth, cardio-vascular system. Exercise and yoga have some advantages and disadvantages.

KEYWORDS: - yoga and exercise, medications and therapeutic purpose, advantages and disadvantages

INTRODUCTION
In 21st century everybody needs to be totally fit and fine. For this yoga and yogic practise is the most important one.1 Yoga can originate from Sanskrit root which means the suppression of all activity of body, minds and make them in order for distinction and liberations. It includes breathing control, meditation and adoption of specific portion of the body.2,3,4 By the yogic method person can obtained control on latent power and self-realization. In modern time, yoga and exercise is used for the medication and therapeutic purpose.5,6 It can help patients to reduce their medications and slow down the disease spread.7

Some yoga practises like asanas and pranayama help to improve the oxidative stress and glycaemia of diabetes patients by neuro endocinial mechanism. Yoga can reduce the cholesterol level.8,9 By the help of yoga, the body can be connected to its solar plexus and batteries where the energy is stored.10 When it’s done or in mid-session of yoga this energy can be release may give the useful effects on their mental, physical and spiritual rejuvenation.11,12 Regular practise of yoga removes the obstructions and flow of energy is more and bring back the harmony and health to the system.13,14 Daily practise of yoga (pranayama) increases the lungs capacity, breathing capacity, blood circulation and cardiovascular efficiency. It also helps to normalized the blood pressure, increases strength, increases the tone of nervous system, improve sleep etc.15,16

Yoga helps to synchronizes the function of mind, muscles, eliminate the stress and stain which can improves the mental and physical fitness. Physical fitness gives support to body to perform daily activity without any fatigue. It prepares the mind to face tough challenges and task.17,18,19

Yoga gives benefits to all ages of peoples. It gives direct effects on physical, physiological and the regeneration of strength process.20 It can also use for warm up, cool down, regeneration and synthesis of mind and body. It also used for the relief from lower and upper extremities of pain.21,22 It included stretching the different part of body like spine cord, backbone. Yoga helps to maintain the health of endocrine gland it maintains the overall functions of different system of body.23,24 Seriously, daily practise of yoga can improve your health and cardio-respiratory efficiency.

TYPES OF YOGA
Yoga is the most important heritage of India. In modern era, world depend on yoga for their various answers. It is the art of living and it may affect various part of the body. Yoga may help to maintain the mental, physical health and may help to develop the moral and intellectually.25,26,27
Different types of yoga are: -
- Bhakti yoga
- Hatha yoga
- Swarayoga
- Asthanayoga
- Mantrayoga
- Raj yoga
- Trantra yoga
- Karma yoga

**IMPORTANCES OF YOGA**

Daily practising of yoga makes you happy and free from body problems. It helps to maintain the physical and mental discipline to achieve a peaceful mind and soul. Yoga can help in many ways like:

- Yoga helps to improve the old and new injuries
- Yoga helps to improves overall organ functioning
- It helps to reduces the stress and enhance the relaxation
- It helps in healthy and glowing skin
- Yoga helps to reduces the pain and enhancing mental clarity
- It helps to Boost the physical strength, stamina, flexibility and immune system
- Yoga helps to enhance the posture and muscles tones and improve the blood circulation
- Yoga help to improve the power of concentration and also self-control

**BENEFIT OF YOGA AND EXERCISE**

Now a day, everyone needs to be fit. Yoga and exercise are one the best way to get fit. It has both therapeutic and preventive benefits. Yoga and exercise may help to connect mind and body. It also helps to improve health and well-being. Yoga has several types of positions which help them to connect with meditation. Yoga help to control the breath throughout the practise it will help to clearing the mind. Regular practise of yoga and exercise gives health benefits. There are some benefits of yoga and exercise are:

1. **Stress and anxiety management**
Yoga and meditation help to reduce the stress level. It also helps to reduce the blood pressure and cardiovascular diseases.

2. **Fitness and flexibility**
Now a day, everyone is busy with their life. Most of the work are on the office bench, it lead to reduces the muscle mass, fitness and flexibility and raises the neck pain, shoulder pains by bending over computers all the time. Possess of yoga may help to stretching and elasting the muscles. Around the globe many athletes may doing yoga in their practises.

3. **Emotions**
For overall well-being, yoga and medications are help to improve the focus of mind. Yoga practisers are happy, calm and focused on their daily life style. Meditations may lead to deep relaxation.

4. **Diabetic health**
Meditation and yoga are used to decreases the sugar level in the blood and also reduces the blood pressure. It also reduces and lower the symptoms of diabetes. Stress is the main reason for sugar level increasing. Daily practising of yoga and meditation can help to reduces the stress level which in turn reduces the level of glucagon and also reduces the insulin levels.

5. **Better health and diet improvement**
In modern era, the life is full of stressful, persons are busy with their schedules. It can exhaust for long hours and sleep less, hypersensitivity and anxiety disorder. Yoga and meditations are helps to reduces these problems and improve the value and possibilities of the life. Yoga help to improve the health benefit and leading to better habit of eating.

**HISTORY OF YOGA**

It is been believe that yoga is developed or originate thousand year ago. Many scientists and Indologists believe that yoga is been develop in late 500 B.C. Now Archaeology survey and scientists confirmed that yoga is been 5000-year-old. This yoga practices came from Harrapan cultures. Vedas are the oldest scriptures. Veda means “Knowledge”. Rig Vedas is the praise of higher power. Yajur Ved, Sama Ved, and Atharva Ved another three vedas. Archaic yoga another name of vedic yoga, peoples are believed in ritualistic way of life. Rituals means the connection to spirit world. For illumination people turn into rishis or Vedic yogis. There are lots of yogic positions which were used by Indian yogic now a days.

**Vedas**

In India, Vedas are the foundation of cultures by philosophy and religion. Major and important Vedas are Rigveda, Yajurveda, Samaveda and Atharvaveda. Rig Veda is the collection of hymns. It is a praise of higher power. There is no direct explanation of word yoga are mentions in any types of Veda but a word ‘dhira’ is mention in every Vedas means self-realized. Vedas explains every sitting position like Asana, the Pranayama, the Mudras, Meditation techniques, the cleanliness Yama and Niyama, the Dharanas. Asanas are mainly used for meditations. In every morning sun salute is the routine activity. Pranayama is done by daily basis. Vedas explain some meditation technique also. Vedas also give information about the Tapas, Vratas and Moksas. Vedas are the oldest scriptures. By Vedic yoga, persons are believed in rituals, sacrifices and ceremonies which means connections to spirit world. For this illumination peoples are turn into rishis
munis. These rishi munis is blessed with the supreme hymns speaks in their marvellous intuitions.\textsuperscript{51,62,63}

**Upanishads**

Philosophy of yoga was based on Upanishads. It said that when the fire is produced by rubbing, where the air is controlled, then mind takes perfection.\textsuperscript{64,65} According to Katha Upanishad, yoga is a chariot, reasoning consciousness is the driver and the body is like a cart. Upanishads shows the true knowledge of reality and essence of Vedas.\textsuperscript{66,67} It is also used for the treatment of diseases. Samadhi were explained by Kathopanishad. It can also explain the qualities of soul. Kenopanishad, Ishavasya Upanishad, Shwetavatara Upanishads these three gives detail about yoga.\textsuperscript{68,69,70}

According to Katha Upanishad, yoga is holding of the senses. According to Maiti Upanishad, yoga is breath, mind and sense oneness.\textsuperscript{71}

**Smriti**

Smriti is a text and it deal with disciplines. Manusmriti, Yajavalkya Smriti, and Harita Smriti this three gives detailed about the yoga.\textsuperscript{72} According to Smriti, Brahmacharya, Grhastha, Vanaprastha and Sanyasa are the four stages of life. The muse of asanas is myths and legends. Asanas and text are the parallel tracks to self-realization.\textsuperscript{73,74}

**Jainism**

Yoga is very well explained in Jainism. According to Jainism, yoga may be defined as the movement of mind and body towards soul. Liberation of spirit is also explained in Jainism.\textsuperscript{75,76}

**TEACHINGS OF BUDDHA**

Yoga was also found in Buddhism. Study of yoga was first done by lord buddha. Buddhism teaching was similar to yoga. Yogachara was the first school which taught about yoga and Buddhists. Now it can open throughout the world. Buddhism include meditation and physical postures. Sukshma dhyana and Nirhara Dhyana types of meditation.\textsuperscript{77,78}

**Panini**

According to Panini, yoga is union with the supreme. It is also a grammarian. lessons of grammar, Astadhyayi were written.

**The Epics**

Detail of yoga, were also written in Ramayana and Mahabharata. Yoga Vaisishta were return in this time. Yama and Niyama were explain in Ramayana. Definition of dharma were defined in this book. Mahabharata and Bhagavad-Gita also show the details of yoga.\textsuperscript{79}

According to yoga sutra, yoga helps to control the mind. Some puranas give detail about yoga. Bhagavata purana show the bhakti yoga. Yama, Niyama and Pranayama are shown by Linga purana. Purana also show the details about Pratyahara, Dharana, and Dhyana.\textsuperscript{80,81}

**EVOLUTION OF YOGA**

**1. Pre-Vedic period (before 3000BC)**

According to western scholars, it was believed that yoga was originated in 500BC it was the time of Buddhism. Depiction of yoga were found at Harappa and Mohenjo-Daro. This shows that yoga was originated around 5000 years ago but there is no evidence about that.\textsuperscript{82,83}

**2. Vedic period (3000 BC to 800BC)**

According to Vedic period, yoga was ritually, concentration development and transcend to mundane. This practise is very much different present yoga.\textsuperscript{84,85}

**3. Preclassical (Upanishad) period (800 BC to 250 BC)**

According to Upanishad, yoga can be explained in Mahabharata and Bhagavad Gita. According to Bhagavad Gita, Jnana yoga, Bhakti yoga, Karma yoga and Raja yoga are the form of yoga. during the Gitopadesha, Krishna explain that at higher state of consciousness, person seek their reality with humility and reverence.\textsuperscript{86,87}

**4. Classical period (184 BC to 148 BC)**

According to classical period, Patanjali has 195 yoga sutras. It is also known as raja yoga. Some classical limbs of yoga are: - Yama (social conduct), Niyama (personal conduct), Asana (physical postures), Pranayama (breathing regulation), Pratyahara (withdrawal of senses), Dharna (concentration), Dhyana (meditation) and Samadhi (transcendence).

Postures and breathing regulation were added by Patanjali for the regulation of yoga it was used as secondary practises after Dhvana and samadhi. It also hasn’t any name of asanas and pranayama.\textsuperscript{88,89,90}

**5. Post classical period (800 AD to 1700 AD)**

The followers of Patanjali gave very impotence to every yoga practises like asanas, kriyas and pranayama, can help to stable or maintenance of body and mind. Body and mind purification can help some practitioners to reaches at higher level like samadhi it is called hatha yoga.\textsuperscript{81,92,93}

**6. Modern period (From 1863 AD onwards)**

At the parliament of religions Chicago, swami Vivekananda introduces yoga to the world. He wrote four paths: raja yoga (meditation), karma yoga (selfless action), bhakti yoga (devotion), and jnana yoga (metaphysics).\textsuperscript{94,95} In 20th century yoga become most popular around the world. Scientist of kaivalya Hama yoga institute and yoga institute Mumbai have initiated systemic practice and research in yoga and it were spread worldwide. It includes teaching set and practitioners in yoga. Now a day, swami Ramdev from India makes yoga more popular and done research on it and make it effectiveness in health care.\textsuperscript{96,97}
FOUNDATIONS OF YOGA PRACTICE
In modern era everyone needs to healthy and fit. Yoga makes that possible. It works on mind, emotion and energy level. Yoga will be classified into following groups:\textsuperscript{98,99}
1. karma yoga- utilization of body
2. bhakti yoga- utilization of emotions
3. Gyana yoga- utilization of mind and intellect
4. kriya yoga- utilized energy

All are practicing the yoga under these four classifications. For ancient times, yoga was directed under the guidance of Guru. Only guru can mix these four-fundamental paths. Guru can give yoga education to daily practiser persons. This education imparted with knowledge, experienced and seers (Rishis/Munis/Acharyas).\textsuperscript{100,101} Yoga education, helps to take care individual. In modern era, yoga education is been given to Yoga Institutions, Yoga Colleges, Yoga Universities, Yoga Departments in the Universities, Naturopathy colleges and Private trusts & societies. Many yoga clinic, preventative health care unit of, yoga therapy etc has been stabilised in hospital, medical institutions.\textsuperscript{102,103}

PHYSICAL ASPECTS OF YOGA
In modern era, yoga and exercises can be a game changer. Physical molding and cantered fixation both are the striking component of yoga. Daily yogic practise makes the person healthy and physical wellness.\textsuperscript{104} Yoga asanas gives the development of spine, for control breath, focus on daily schedules. Due to muscular and physical stress, body imbalance is occurring which may lead to different aches and pains. Asana is done by smooth, control movement to provide the maximum stretch to body.\textsuperscript{105,106}

PHYSIOLOGICAL ASPECTS OF YOGA
Yoga helps to improve the legitimate working of the body. Yoga nourishes the endocrine gland which is useful for development and advancement. It has been proved that yoga can increases the capacity of processing and breathing.\textsuperscript{107,108} It helps to blood flow to the mind and improve the mental health. Yoga can improve muscle strands and nerves for physiological work. Legitimate can be improve the joints, breath and blood pressure.\textsuperscript{109,110}

YOGA IMPROVES HEALTH
1. Improves your flexibility
   Flexibility is the first and most beneficial of yoga. Normal person cannot touch his feet’s but continuous practices of yoga can help them. Continuous using of yoga can remove or decreases the pain and aches.
2. Muscle strength
   Strong muscle help to protect us from arthritis, back pain etc. strength is made up by yoga.

3. Protect your spine
   Crave movement help the spine to take their nutrition. Some asana practices may keep this disk supple.
4. Blood flow
   Yoga helps to increases the blood flow in the body. it helps to circulate the blood specially hands and feet. Yoga boots the haemoglobin and red blood cells level, it carries oxygen to cells and helps to increases the blood flow in heart and may reduce the swelling in kidney or heart problems. Blood clot is responsible for heart attack and stocks, yoga may help to remove or dilute theses clots and make person healthy.\textsuperscript{111,112,113}
5. Focusing
   Now a day, focus is much more important then everything. For any kind of work focus is important. Yoga helps to improve your focus, reaction time, memory and IQ.
6. Improve system and balance
   Yoga can encourages relax, slow your breath, focus and sift the balance the sympathetic nervous system. This improve the blood flow to intestine and reproductive organs, decreases the blood pressures. Regular practices of yoga exercise improve body balance. It removes or decreases the back pain, knee pains and other body problems.\textsuperscript{114,115,116}
7. Immune system
   Yoga (asana and pranayama) can improve or boost the immune system. Meditation is the important way of boosting immune system.
8. IBS and other digestive problems
   Now a day, everyone suffers with many kinds of diseases or problems. Some are ulcer, irritable bowel syndromes and constipations. Some yoga practices may help to improve the constipation problems and also lower the risk of colon cancers. In physical practises body can move which help in digestion and removes the waste product from the body.\textsuperscript{117,118,119}

PHYSICAL FITNESS
Physical fitness is defined as the combination of qualities it enables to perform physical activity. Physical fitness is the ability of aspects of sports, occupation and activity.\textsuperscript{120,121} It can be achieved by proper nutrition, physical activity and sufficient rest. In modern era, fitness may be defined as the person and machine’s ability to perform a function and ability to perform various activity. Physical fitness may help in to reduces the many types of heart disease.\textsuperscript{122,123}

CATEGORIES OF PHYSICAL FITNESS:
It can be sub-divide into 5 categories: -
1. Cardiovascular fitness: -
   On a sustained period of time, the body is able to deliver the oxygen and nutrition to the tissue and to remove the waste product. Aerobic exercise can be used to improve this cardiovascular fitness. This may moderate the level of intensity over a long period of time.

2. Muscular strength
   It may define as the ability of the muscle to exert force for a long period of time.

3. Muscular endurance
   In which a muscle, a group of muscles continue to apply the force against the objects. Weight training may help to develop the strength and it may increase the size of skeletons.\textsuperscript{124,125}

4. Flexibility
   It may be defined as the ability of the muscles to roll over and to move the joints in full motions.

5. Body composition
   Composition means the lean mass and fat mass. Body/mass index help to optimized the ratio of fat to lean mass. It may also help to determine whether the person is healthy in their body type.\textsuperscript{126,127}

**IMPORTANCE OF PHYSICAL FITNESS**

Physical fitness may produce the positive effects on body’s blood pressure. It may also help in making a stronger heart. There is some importance of physical fitness are: \textsuperscript{128,129}

1. **Health booster**
   Regular exercise can boost your health and maintain whole body. It can also help to maintain the lungs and heart. It can reduce the chronic illnesses. It is used for better sleep, immune booster, increase stamina.

2. **Improve mental health**
   Physical fitness can also help to improve the mental health of the person. It can help to improve the concentration, increases memory and also increase the learning capacity. It can reduce the stress, anxiety, depression and fatigue.\textsuperscript{130,131}

3. **Social benefits**
   Physical fitness can increase the cohesion with families and community. It helps to improve the social and community networks with others. It can reduce the sense of isolation and loneliness.

4. **Strength and stamina**
   Physical fitness increases the bone density, flexibility and muscular strength. It helps to bones stronger and muscle grow. It can give better balance and better protective against the injuries.\textsuperscript{132,133,134}

**REFERENCES**


77. Dassgupta, Surendranath A History of Indian Philosophy, I, Delhi, India: 1975: 226.


105. Connors GJ, Maisto SA, Donovan DM. Conceptualizations of relapse: a summary of