ABSTRACT

Cold is generally characterized by initial symptoms of a stuffy nose, sore throat, runny nose, mild fever, headache, mild fever. Infection of cold is a viral infection. The cold lasts for a maximum of two weeks. Cold primarily affects the nose and throat, mainly the upper respiratory tract and throat are affected. The cause of cold is a viral infection, many viruses are responsible for cold. The treatment prescribed by medical practitioners involves analgesic, antihistamine, decongestant, nasal steroids. All medicines show side effects like dizziness, drowsiness, blurred vision. Thus, there is a need to find a treatment for a cold having no therapeutic side effects. Yoga is now a days followed as a way to live a healthy life. B.K.S Iyengar yoga focuses on precise physical ailments of the body with particular postures. Very few studies on the effectiveness of B.KS Iyengar yoga have been conducted. The current survey focuses on finding the efficacy of performing specific yoga sequences for cold.

Keywords: Yoga; cold; B.K.S Iyengar; breath; pranayama; medication; usage; quality of life.
1. INTRODUCTION

The common cold is a viral contamination of the nose and oesophagus (upper respiratory tract). It's usually non-dangerous, although it might not sense that way. Many types of viruses can cause a common cold. Infants younger than 6 are at tall risk of colds, but fit adults can also anticipate having two or three colds annually [1]. Most human beings recover from a common cold in a week or 10 days. Symptoms might stay longer in people who smoke. Medical practitioners prescribe analgesic, antihistamine, decongestant, and nasal steroids but these medicines show side effects like dizziness, drowsiness, blurred vision. Some decongestants also narrow blood vessels and are harmful and life-threatening for hypertension patients. To counter the side effects of medications prescribed it is advisable to opt for a treatment that has less or no side effect [2].

Home remedies for cold include the most followed and habitual home remedies for a cold is gargling with saltwater, rest, and drinking a lot of water. Some research also proves that herbs like echinacea may be successful at lessening symptoms of a cold. These remedies don’t cure or treat a cold. Instead, they can exactly make symptoms less serious and easier to manage [3].

Many natural ancient remedies are available nowadays such as Ayurveda, Unani, yoga show no side effect of treatment. Out of all-natural remedies, yoga is followed the most in today’s times. Yoga is not a religion, it’s a method of livelihood that focuses on a fit mind and a fit body. Man is a physical, mental and spiritual being; Yoga helps in growing the stability between all the three as stated in Ayurveda in India [4]. Yoga is not only about bending or twisting the human body and holding the breath. It is a method to bring the person into a state where the person sees and encounters reality simply the way it is. If you enable your energies to become cheerful and euphoric, your sensory body enlarge. This ensures you live the whole universe as a part of yourself, making everything one, this is the union that yoga creates. The founder of Yoga, Patanjali stated, “Sthiram sukham asanam”, it states that a position that appears to be hard and acceptable is your asana. Some of the benefits of Yoga are: boost brain function, reduces stress levels, changes gene expression, Improves flexibility, reduces blood pressure, enhance lung capacity, reduces anxiety, cures chronic back pain, reduces blood sugar in diabetics, a better sense of balance, stronger bones, normal weight, less risk of heart diseases [5–8].

Yoga as a practice has countless benefits that constructively affects a person both physically and mentally. Whether it is lowering your blood pressure or raising your pain tolerance B.K.S Iyengar developed iyengar yoga based on eight limbs of yoga as described by Patanjali’s Yoga Sutra, B.K.S Iyengar yoga emphasizes the precise physical alignment of the body within particular postures [9]. B.K.S Iyengar yoga is a disciplined system planned carefully in timed sequences. In B.K.S Iyengar yoga, props are used often, blocks and belts, are used to ensure people can practice the postures with correct alignment and safely develop their yoga practice with time [10]. The yoga sequence for cough mention by B.K.S Iyengar involves: Sirsasana, Sarvangasana, Uttanasana, Paschimottanasana, Kurmasana, Supt kurmasana, Ujjayi pranayama. Table 1, Table 2 and Table 3 show the asana and posture mentioned by B.K.S Iyengar for cold [3,5].

1. Sirsasana:

<table>
<thead>
<tr>
<th>Yoga Asana</th>
<th>Yoga posture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salamba Sirsasana I, II and III</td>
<td><img src="image1" alt="Image" /> <img src="image2" alt="Image" /> <img src="image3" alt="Image" /></td>
</tr>
</tbody>
</table>
Yoga Asana | Yoga posture
--- | ---
Urdhv Padmasana in Sirsasana | ![Image](image1.png)

2. Sarvangasana:

Table 2. Shows Sarvangasana yoga asana and postures [12]

<table>
<thead>
<tr>
<th>Yoga Asana</th>
<th>Yoga posture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salamba Sarvangasana</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>Halasana</td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>Eka Pada Sarvangasana, Urdhva Padmasana in Sarvangasana</td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>Uttana Padma Mayurasana</td>
<td><img src="image5.png" alt="Image" /></td>
</tr>
</tbody>
</table>
3. Other asanas as mentioned by B.K.S Iyengar for cold include:

**Table 3. All other asana for cold and postures of asana [13]**

<table>
<thead>
<tr>
<th>Yoga asana</th>
<th>Yoga Posture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uttanasana</td>
<td><img src="image1" alt="Uttanasana" /></td>
</tr>
<tr>
<td>Paschimottanasana</td>
<td><img src="image2" alt="Paschimottanasana" /></td>
</tr>
<tr>
<td>Kurmasana</td>
<td><img src="image3" alt="Kurmasana" /></td>
</tr>
<tr>
<td>Supt Kurmasana</td>
<td><img src="image4" alt="Supt Kurmasana" /></td>
</tr>
<tr>
<td>Yognidrasana</td>
<td><img src="image5" alt="Yognidrasana" /></td>
</tr>
<tr>
<td>Ujjayi Pranayam</td>
<td>Take a deep, slow steady breath through both nostrils, passage of the incoming air is felt on the roof of the palate and makes a sound (Sa), sound should be heard. Lungs are filled up to the brim, filling is called <em>Puraka</em> (inhalation), the abdomen should not bloat in the process of inhalation. The entire abdominal area from the pubes up to the breast-bone should be pulled back towards the spine, hold the breath for a second or two, internal retention is called <em>tara kumbhaka</em>, exhale slowly, steadily and deeply, until the lungs are empty completely, exhale and keep your grip on the abdomen. After two or three seconds, relax the diaphragm gradually, air should be felt on the roof of the palate and brushing on the palate should make an aspirate sound (ha), exhalation is called <em>rechaka</em>, wait for a second before drawing a fresh breath, waiting period is called <em>bahya kumbhaka</em> [3].</td>
</tr>
</tbody>
</table>
Cold is generally harmless. Symptoms of cold generally start from the second to the third day after the person has become infected. An infected person may spread the infection for 3 to 4 days after the symptoms begin. Runny nose, sore throat, congestion, coughing, sneezing, low fever are symptoms of cold [14]. Droplets present in the air coming from coughing and sneezing may cause virus infection. Mucus coming out of the nose is generally yellow and thick in the beginning and later colour of mucus changes to white, yellow, green colour. In most cases, the cold gets clear up within 2 weeks of the onset of symptoms. In most cases, the cold gets clear up within 2 weeks of the onset of symptoms. Cold is generally harmless. Symptoms of cold generally start from the second to third day after the person has become infected [15]. The infected person may spread the infection for 3 to 4 days after the symptoms begin. Current study suggests the effectiveness of B.K.S Iyengar yoga for cold on 18 to 35 years and 60-65 years candidates.

2. RESEARCH QUESTION

- What is the effectiveness of B.K.S Iyengar's yoga plan for cold?

3. REVIEW OF LITERATURE

W Selvamurthy et al. [6] conducted studies on the effectiveness of 6 months of yoga practice on a specific age group of people. But the study lacks in providing the data of effectiveness of performing specific yoga positions for 10 days and in young age people and senior citizens. C Rajak et al. [7] studied the effect of doing regular pranayama and yoga for six months, studies covered the effect of performing regular yoga for six months and the effect of performing yoga in cardiovascular activity to cold press test in candidates who were hyperactive for cold press test. The current study focuses on finding the effectiveness of performing B.K.S Iyengar yoga mentioned for cold [3].

Ritu Bajpai et al. [8] studied the effect of regular practice of bhramari pranayama and yog nidra for 3 months and the effect of performing regular pranayama and yog nidra in cardiovascular hyper-reactivity to the cold pressor test is observed in young healthy medical students. The study did not cover the effect of performing specific yoga poses as mentioned by B.K.S Iyengar for cold [5]. Thus, some studies conducted on yoga in finding the effectiveness of yoga in the specific age group of the population, some involved in studying the effect of yoga in cardiovascular activity and some focuses on the effect of pranayama on cardiovascular hyperactivity and lacks in providing the data on the efficacy of B.K.S Iyengar Yoga pattern for cold.

4. METHODOLOGY

A survey was conducted on different age group people, regularly doing yoga practice, candidates regularly performing yoga were taken for survey along with those suffering from cold. The main objective of taking candidates suffering from cold is to get the results of the effectiveness of B.K.S Iyengar yoga sequence given for cold and to spread the awareness of performing specific yoga postures when suffering from cold. A total 40 candidates were selected for the survey and divided into ‘A’ and ‘B’ groups. ‘A’ group involved candidates from 18 to 35 years and ‘B’ group involved candidates from 60 to 65 years. All the candidates were asked to perform yoga sequences for 10 days.

Sample:

A total of 40 candidates were taken to conduct the survey, all candidates suffering from cold and performing yoga as a regular practice were selected for the survey, and all the candidates were divided into two groups A and B. A group included candidates from 18 to 35 years and in B group candidates from 60 to 65 years were present. All the candidates were asked to perform a yoga sequence for 10 days.

Instrument:

A questionnaire form is distributed in the park and candidates suffering from cold and regularly performing yoga was taken for the survey.

All the candidates suffering from cold in the range of 18 to 35 years and senior citizens in the age range of 60 to 65 years and also doing yoga regularly and 3-4 days a week are considered for the survey. All the candidates were asked to come for yoga sessions in the morning or evening. Few candidates attended morning sessions, few attended evening sessions. Both morning and evening groups were asked to perform yoga sequences as mentioned by B.K.S Iyengar,
Table 4. Representation of Survey questionnaire form

<table>
<thead>
<tr>
<th>Name:</th>
<th>Age:</th>
<th>Sex:</th>
<th>Any medication:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice yoga</td>
<td>Regularly:</td>
<td>3-4 days a week:</td>
<td>Never:</td>
</tr>
</tbody>
</table>

Do you perform any of the following yoga asana?
1. Sirsasana: Yes No
2. Sarvangasana: Yes No
3. Halasana: Yes No
4. Eka Pada Sarvangasana: Yes No
5. Urdhva Padmasana in Sarvangasana: Yes No
6. Uttana Padma Mayurasana: Yes No
7. Uttanasana: Yes No
8. Paschimottanasana: Yes No
9. Kurmasana: Yes No
10. Supt kurmasana: Yes No
11. Yoganidrasana: Yes No
12. Ujjayi Pranayam: Yes No

Suffering from cold
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous Respiratory Problems</td>
<td>Yes</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married</td>
</tr>
<tr>
<td>Education</td>
<td>Graduate</td>
</tr>
</tbody>
</table>

Table 5. Results showing effectiveness of B.K.S Iyengar yoga sequence for cough on different age group

<table>
<thead>
<tr>
<th>Group Details</th>
<th>Highly effective</th>
<th>Moderately effective</th>
<th>Less/Not effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>'A' group 18 to 35 years (20 candidates)</td>
<td>12</td>
<td>8</td>
<td>Nil</td>
</tr>
<tr>
<td>'B' group 60 to 65 years (20 candidates)</td>
<td>16</td>
<td>4</td>
<td>Nil</td>
</tr>
</tbody>
</table>

Starting from 0:10 secs duration to gradually increase each yoga position to 1:00 min duration. Both the morning and evening groups were asked to perform yoga for 10 days to see the effectiveness of yoga postures performed on cough. 20 candidates in the morning group and 20 candidates in the evening group were involved in the survey. All the 40 candidates were grouped as 'A' group belonging to 18 to 35 years and B group 60 to 65 years. The average result of both 'A' and 'B' group people was considered. Table 4 shows the questionnaire form given to candidates.

5. RESULTS AND DISCUSSION

The survey was conducted on two groups, 'A' group and 'B' group. 'A' group candidates were in the range of 18 to 35 years and 'B' group candidates were in the range of 60-65 years. A total of 40 candidates were surveyed. 'A' group involved 20 candidates and 'B' group involved 20 candidates. All the candidates considered for the survey had cough problem and were performing yoga previously, but all the candidates were not performing the specific yoga sequence for cough as mentioned by B.K.S Iyengar. After doing yoga as mentioned by B.K.S Iyengar, the average result obtained for both 'A' and 'B' groups were considered. The effectiveness of yoga sequence performed was rated as highly effective, medium effective and less/not effective (Table 5).

6. CONCLUSION

The survey was conducted on 40 candidates of different age groups, 'A' group 18 to 35 years and 'B' group 60 to 65 years, all candidates were performing yoga previously, but the specific yoga sequence was not performed by all these candidates. The yoga sequence performed involved an inversion yoga pose to increase
blood flow in the brain, forward bend yoga pose to increase blood flow inside the lungs, pranayama also to body blood flow, all the sequences were designed to positively affect body system. The results obtained clearly show the high efficacy of performing B.K.S Iyengar Yoga for relieving cough for both 'A' and 'B' groups. Both the groups considered are candidates who perform yoga in the morning but for more accurate survey, information may be collected from people who perform yoga in the evening.

CONSENT

It’s not applicable.

ETHICAL APPROVAL

As per international standard or university standard ethical approval has been collected and preserved by the authors.

COMPETING INTERESTS

Author has declared that no competing interests exist.

REFERENCES