

# Analysis and Prevention of Office Syndrome of People in Thailand

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## ABSTRACT

Office syndrome is dangerous in long-term health such as headache, eyes soreness, neckache, dizziness, chronic muscle pain, numbness around wrists or feet. In severe cases, it may cause the muscles to contract and hold tight. Therefore, understanding the cause can prevent the danger from this illness. The objectives of this research are to study the behaviors causing Office syndrome in Thai by evaluating the basic knowledge of Office syndrome and inform the useful information to prevent the danger of Office syndrome. 312 participants in the age range of 20-40 years answered the online questionnaire as a tool for data collection. The questionnaire is included 3 sections, 1) personal data, 2) the risks of Office syndrome in each person, and 3) basic knowledge of Office syndrome. The results showed that most of the research participants are female, age between 20-27 years old, and work 5-8 hours a day. 224 people are at a high risk of back pain from Office syndrome and only 83 people have received the basic knowledge of Office syndrome. There are 183 people aware of the Office syndrome symptom. This study found that some participants have well-

knowledge about Office syndrome but some still misunderstanding the symptoms of the illness. Therefore, the organizations such as companies or schools should provide basic knowledge and quality Office equipment in workplaces to reduce the risks of Office syndrome and create good habits for their people.

**Keywords:** Office Syndromes, Headache, Soreness, Neckache, Dizziness, Chronic muscle, Pain numbness.

## INTRODUCTION

It is obvious that the majority of recent city life consists of a desk job, people usually sitting in front of a computer screen in the same position for an hour. Even though this lifestyle does not seem to be dangerous or harmful, it can have major consequences to your body, particularly muscles and spines (Understanding Office Syndrome - Samitivej Hospital - Bangkok Thailand, n.d.).

Office syndrome is a set of conditions occurred due to sitting in the same position for long periods. It can lead to chronic pain, intervertebral disc disease, and abnormalities in the spine if untreated for the long haul. It is possible that your posture and movement will be harmed severely. Not only the posture while working is significant, but poor air quality in the workplace can also injure workers' health (the Elements Wellness Group, n.d.).

Mission Health Promotion Center reported that 60 to 70 percent of Office employees, aged 16 to 35, were suffered from Office syndrome due to stress from high responsibility. If people are left untreated, the symptom can severely injure them. Some individuals are unable to move the upper part of the body like the head. Headache, sore eyes, neck pain, chronic muscle pain, backache, aching, and tightness in the shoulders are some of the most prevalent and early signs of Office syndrome. Some people may feel unhappiness, sorrow, or acute fatigue due to suffering from symptoms (Chantaracherd, n.d.).

The study aims to understand the action that can lead to Office syndrome and evaluate knowledge about Office syndrome at different ages. This study also intends to provide information about the danger of this symptom, so they can protect themselves or have advanced treatment before getting a serious injury. The questionnaire was created to collect the data and study the behavior of people while working.

## THEORY

The name Office syndrome comes from the condition of spending too much time in the same posture for a long period which usually happens to Office workers. People

who work on a computer for more than seven hours each day, mostly Office employees, tend to suffer from this symptom more than other groups of people. Office syndrome is divided into three stages: remedial stage, supplement stage, and prevention stage. The remedial stage represents the suffering period which requires both medical and physical care. The supplement stage refers to the beginning of pain. Massage, yoga, or stretching can help in this phase. The prevention stage denotes to a painless stage that can be retained by exercising or focusing on. The supplement stage denotes the onset of pain or a physical warning. Massage, yoga, or just stretching can help in these situations. The preventative stage refers to a pain-free phase that can be pre-served by engaging in regular exercise that focuses on strengthening muscle (Kaewpanukrangsri, n.d.).

## **Symptoms of Office Syndrome**

### 1) Repetitive Strain Injury

Repetitive Strain Injury (RSI) is an injury caused by cumulative damage in muscles, nerves, and tendons from the overuse of those parts. The majority of injuries are caused by repetitive activities in daily life. There are many jobs that can lead to Repetitive Strain Injury, for example, working in an assembly line, typing data into a computer, working for a long duration without rest, or working on a task that requiring force, such as lifting heavy things in a poor posture. The low temperature in an Office can raise the chance of RSI and worsen the symptoms (Diagnosing Repetitive Strain Injury, *n.d.*).

### 2) Computer vision syndrome

Eye and vision disorders caused by prolonged focusing of the eyes on the digital screen such as computer, tablet, e-book, or telephone. The length of time spent in front of a digital gadget leads to enhance the level of discomfort and vision problems. The symptom is temporary and then lessened after the users stop using the digital display. In some cases, some people may continue to have visual problem like blurred vision, eye irritation, red eyes, or double vision. If those people are left untreated, the symptom will reoccur or maybe worsen (Computer Vision Syndrome, *n.d.*).

## **Risk factors of Office Syndrome**

### 1) Psychosocial and organizational factors

Colleagues in the workplace should be supportive of employees' psychological or mental health. Protecting against stress at work is one of the significant issues to concern in psychological assistance. The ability to work in an Office is substantially linked to psychosocial characteristics at work, such as teamwork, stress management, and self-development. Physical health is predominantly impacted by lifestyle factors, the consequence of an unhealthy lifestyle tends to have greater for older workers than the younger ones (Government of Canada, 2020).

## 2) Workaholic

A workaholic is a person who is obsessed to work. It indicated that the person works excessively and may feel compelled to do a job. The workaholic is not synonymous with hard work. Even though the word workaholic seems to have a negative meaning, it is occasionally used by those who want to show their love for their job in a positive way (Workaholic, n.d.).

## Treatments

### 1) Chiropractic medicine

Chiropractic therapy focuses on putting the skeleton of the body's structure into proper alignment to relieve the pain for muscles and joints. There is no pain and make the body perform at its best when it is properly aligned. The manual adjustments that a chiropractor may do on the spine and neck are familiar to most people. These adjustments operate by physically repositioning the vertebrae back into place, relieving pressure on the compressed vertebrae or pinched nerve (The Benefits Of Chiropractic Care For Office Workers, n.d.).

### 2) Yoga

Yoga is an exercise that brings the body, breathe, and mind together. It improves general health through physical postures, concentration, and deep breathing. Yoga is now practiced as a form of exercise to reduce stress, promote health, and enhancing mental and emotional health, rest, and stability, as well as relieving backache, neck pain, and menopause symptoms. It also helps people deal with the stress or depression symptoms (Yoga for Health, n.d.).

## METHODOLOGY

This research is non-experimental design, Tool used to study is the questionnaire and analyze data by statistical method. 312 participants who take part in this study aged between 20-40 years old in Thailand. The processes in this study consist of two parts following:

1. Studying information about Office syndrome including causes, symptoms, and treatments.

2. Creating and distribute the questionnaire to people using Google form. The questionnaire is divided into 3 sections

- 2.1 General questions about participation information such as gender, age, education, and working duration per day

2.2 Questions about the receptive level in the risk of Office syndrome in each person such as symptoms that are relevant to Office syndrome, working environment, exercise, and training. The score was divided into 3 levels which are low, medium, and high; the length of the class interval is determined by finding the range of scores, maximum score minus the minimum score, then divide by the number of class intervals. The maximum score is 1 minus minimum score which is 0 and divide by 3, so the interval of the scores can be seen in Table 1.

2.3 Questions about the knowledge of Office syndrome. The participants will be asked questions about risk behavior, symptom, risk job, treatment of the illness. In this section, the data were considered into 2 parts which are the mean scores and the number of participants who answer correctly, the scores are divided into 3 levels. For the first one, the length interval is calculated by using the maximum score which is 5 minus minimum score, 0, and divide by the bin which is 3, shown in Table 2.

3. Collecting the questionnaire and analyze the risk of people from Office syndrome by statistical method, also evaluate fundamental knowledge of people about the danger of Office syndrome.

**Table 1.** The score interval and the levels of receptive in the risk of Office syndrome.

Score	Level
0.00 – 0.33	Low
0.34 – 0.66	Medium
0.67 – 1.00	High

**Table 2.** The mean score interval and the levels of receptive about the knowledge of Office syndrome

Score	Level
0.00 – 1.67	Low
1.68 – 3.34	Medium
3.35 – 5.00	High

Table 3 shows the number of participants who get a correct answer using the same method. The maximum is 312 minus minimum which is 0 after that, divide by 3.

**Table 3.** The number of participants that answer correctly about the knowledge of Office syndrome.

Score	Level
0 – 104	Low
105 – 208	Medium
209 – 312	High

## RESULTS

After collecting the data from 312 people aged between 20-40 years old in Thailand, here is the result in section 1

1. Gender	
Male	113 people
Female	199 people
2. Age	
20 – 27	199 people
28 – 34	64 people
35 - 40	49 people
3. Education	
12 <sup>th</sup> grade or less	11 people
Graduated high school	39 people
Bachelor's degree	212 people
Post-graduate degree	50 people
4. Working time	
1 – 4 hours	61 people
5 – 8 hours	155 people
More than 8 hours	96 people

**Table 4.** The level of people about the danger of Office syndrome.

Risk level	Number of people	
	Yes	No
1. Do you have back pain during the day?	244	68
2. Do you think that the workplace environment is appropriate for work?	244	68
3. Do you stretching during the day?	226	86
4. Have you received training on Office syndrome from the company?	83	229
5. Do you know the dangers of Office syndrome?	220	92
6. Do you know how to prevent Office syndrome?	188	124

**Table 5.** The number of people who get the correct and wrong answer

Questions	Number of people	
	Correct	Wrong
1. What causes Office syndrome?	284	28
2. Which of the following are not symptoms of Office syndrome?	182	130
3. Which jobs have the highest risk of Office syndrome?	240	72
4. Which part of the body is most affected by Office syndrome?	262	50
5. Which sports are the best way to prevent Office syndrome?	291	21

As can be seen from the results, most people know about Office syndrome but they may not know the appropriate way to prevent it. Moreover, the majority of participants have not received training on Office Syndrome from the company. There should be a strong regulation that companies have to provide their employees a training to prevent and control Office Syndrome.

## DISCUSSION

In section 1, personal data of the participants, the results show that the most people are female with the percentage of 63.8%, aged between 20 – 27 years old about 63.8%. There are around 67.9% studied in bachelor's degrees and 49.57% of participants worked 5 – 8 hours in a day.

In section 2, the receptive level in the risk of Office syndrome in each person is in medium level ( $M=0.64$ ). The major part of participants tends to injure from Office syndrome with the number of 244 people. They think that their Office is appropriate for work and there are 226 people who usually stretching in a day. Only 83 people had received training on Office syndrome while most of the people, 220 people, are aware of this danger and 188 people know how to prevent Office syndrome.

In section 3, it can be seen from the data that the average overall scores of the participants are 4.04 which is a high level, displayed that people had well general knowledge about the danger of Office syndrome. When we consider each question,

the knowledge about the symptoms in Office syndrome has the lowest number of people who answered correctly, 182 people, while most of the people know which sports can prevent Office syndrome, 291 people.

## CONCLUSIONS

According to the results from the questionnaire, we suggest the solutions that will be useful for the involved department as below:

### 1. Provide free training

There are many research participants who don't know how to prevent Office syndrome also, did not receive training from their company or school. The government sector should consider this problem and provide training or instructional media to every people, suggest people to have yearly medical examination because it will reduce the number of people who will be suffer from Office syndrome.

### 2. Personal behavior

The company should inspect their employee's workplaces and support them to have an appropriate workplace, for example, use tables and chairs that have quality, adjustable, and suitable for Office work.

### 3. Education factor

It can be seen from the research that education has an effect on the understanding and awareness of people about Office syndrome. Government should find a way to introduce people about the danger of Office syndrome to all levels of people in the country since high school.

### 4. Mental factor

The major group of people suffered from Office syndrome aged between 20 – 27 which is studying and working age. One of the mental health issues occurs in both students and employees is large workload. Those people want to complete all the tasks on time with the best result which lead to many problems such as health problem, burnout, anxiety, and stress. Teachers and employers must find a balance between the assignment and the mental health of their people to prevent them from mentally and emotionally exhausted.

To conclude, education is the best long-term solution that can prevent people from this illness, the public health department should provide useful knowledge to the people. If people know the right information on how to prevent Office syndrome, it will be affected to their behavior in daily life. Those people will use suitable equipment and proper posture while doing work. Government can help in this part by



providing free training and supporting quality equipment to all schools including rural schools to prevent Office syndrome from students and teachers. Furthermore, as a teacher and employer, mental issues must be concerned in an organization to improve the wellbeing of the people under your control. However, there are some factors causing Office syndrome that we did not study in this research for instance participants' occupation and type of works. Also, we did not follow up on the participants' results that whether they behave as we suggest or not so in the future research we should design a questionnaire that includes more factors and can follow up with the participants to increase more accuracy in the research.

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