

Computer-related RSI

A study of the Swedish population's experiences of computer work.



Computer-related RSI – a national health problem?

More and more people spend increasingly long hours working at computers. In our study, which was conducted in collaboration with Kantar Sifo¹, we examined what proportion of Sweden's working population have experienced arm, shoulder or neck pain from working at computers. The study results show that out of the 3 million Swedes who work more than two hours a day at computers, over half – or approximately 1.9 million – have experienced arm, shoulder or neck pain. And the situation does not appear to be improving. Today, children start using tablets and computers as early as two years old, and there are now reports of RSI in younger people. This problem risks becoming a national health issue, and needs to be discussed and addressed in order to minimise the damage.

People (*Homo sapiens*) are believed to have existed for roughly 300,000 years. For approximately 299,850 of these years, most people used their bodies to perform tasks such as hunting, farming and growing crops. Our bodies are genetically designed to be constantly moving. However, our lifestyle has changed radically over the last 150 years. With the onset of the industrial era, a more sedentary work pattern emerged in workplaces. And since the 1970s, in the post-industrial revolution, computers have become perhaps the most commonly used work tool.

Ergonomics and computer glasses

To address the problem, the Swedish Work Environment Authority initiated a campaign in the mid-1980s focusing on ergonomics and employees' right to computer glasses. The Swedish Confederation of Professional Employees (TCO) also began campaigning for better computer screens, and an official standard was established in 1992. Not much progress has been made since then; it is still very difficult to get computer-related RSI recognised as an occupational illness.

Our study shows that many people have RSI, and it is time to start ascertaining how this widespread problem can be reduced with the help of employer initiatives and new work procedures.

A growing problem

So far, it has been believed that computer-related RSI builds up over a long time and can develop into a chronic disorder. We typically imagine RSI to affect middle-aged people who have spent a long time working at computers. Although this is true to a certain degree, our study shows that many young people also suffer RSI. Although this problem had already been predicted, it is escalating faster than expected. This is yet another argument for tackling this growing problem sooner rather than later.

5 findings and practical tips

Here we list five findings that clearly illustrate the problem. We have also compiled a list of practical tips for preventing unnecessary pain when working at a computer. You can find the report and more information at www.mousetrapper.com.

¹ The study was carried out by Kantar Sifo in February 2018 by means of telephone interviews with 1,431 respondents. The difference between the experimental group and the control group was calculated using a Chi-Square test, with a significance level set at 95%.



Finding #1 A national health problem

1.9 million Swedes have experienced RSI-related pain when using a computer screen

Approximately half of the Swedish population (about 5 million people) work². According to our study, roughly 75% of these individuals (3.750.000 people) work in front of computers.

90% of them (3.400.000 people) spend more than two hours per day at a computer screen. 57% of these individuals reported having experienced pain while working at a computer.

This means that 1.9 million Swedes have been in pain when using computers.

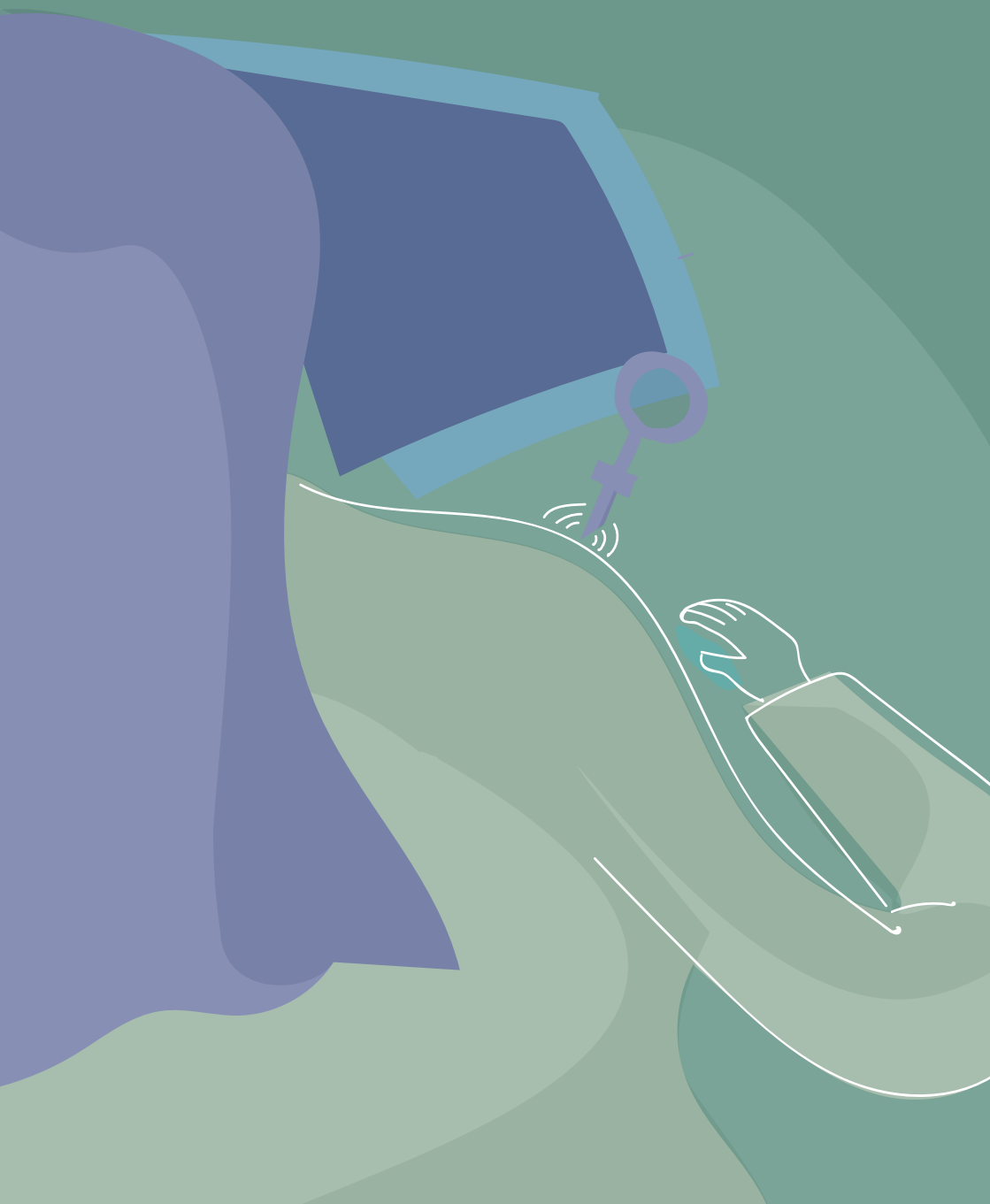
Comments

Our study investigated workplace practices and the number of hours people spend at computers. However, if you add up all the time we actually spend using different devices – including tablets, smartphones and computers – most people probably spend several more hours per day in front of a screen.

Another interesting observation is that in principle, the amount of time people spend at computers remains roughly the same throughout their professional life. 92% of the youngest age group (18-29 years) spend at least two working hours per day at a computer. For the oldest age group (50-64 years), the figure is 91%. The difference is that the oldest group did not spend time at a computer in their twenties.

² Source SCB





Finding #2 Women are more susceptible than men

1.1 million women have experienced RSI-related pain when working at computers

Our study suggests that the proportion of women who have experienced pain is over-represented. Approximately 1.100.000 (69%) of the female respondents who work at computers have experienced RSI-related pain, compared to approximately 800.000 of the male respondents. The total number of female respondents aged 18-64 was approximately 3.000.000. This means that a third of the women in Sweden have suffered from RSI-related pain!

Comments

One theory as to why women are more susceptible than men is that women generally have more monotonous work tasks³. Women are also more susceptible to stress-related problems such as muscle tension, which increase the risk of computer-related injuries. It is worth considering whether other measures should be taken to reduce the problem among women. Further research might be needed to determine what these measures might be.

³ <https://www.kollega.se/sju-av-tio-far-ont-av-jobbet#>

Finding #3 A ticking bomb

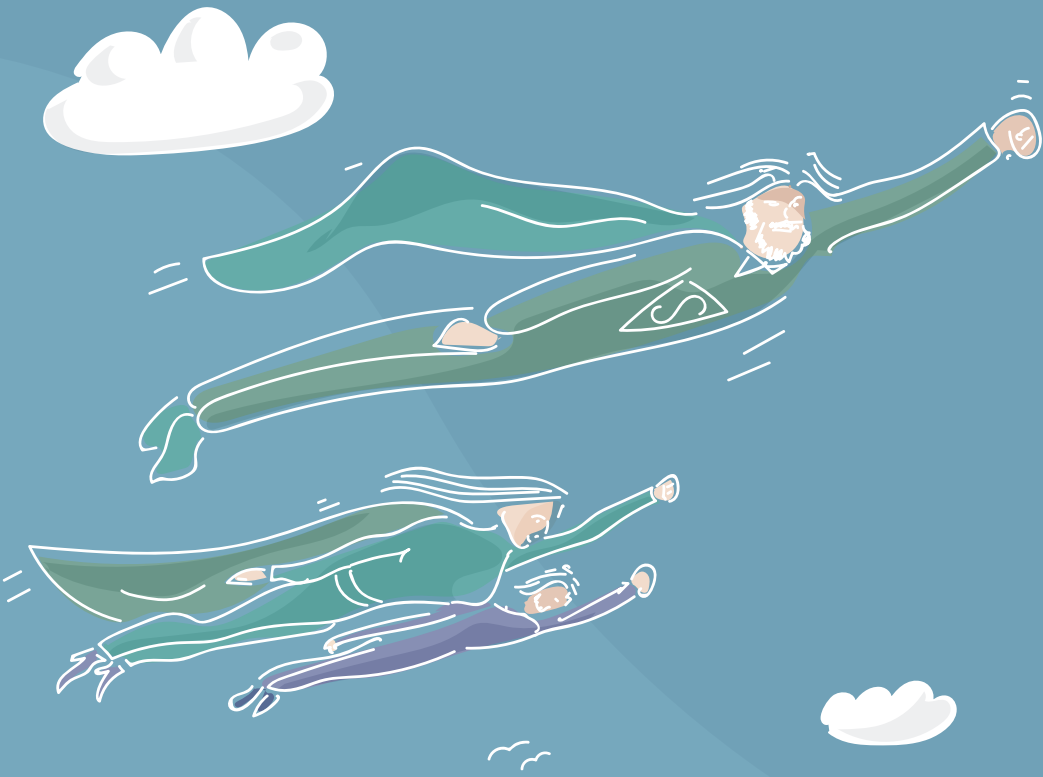
540.000 young people have experienced pain at the computer

One surprising finding was the large number of young people affected by RSI. One might believe it would take many years for painful symptoms to develop. Yet the study showed that 64% of the youngest age group (18-29 years) have experienced RSI-related pain at the computer. This problem is a ticking bomb, and there is a risk that more and more people will have problems performing their jobs in the future.

Comments

A likely reason is that many young people overlook the problems and expect the symptoms to simply pass. Moreover, the people in this age group have been using computers daily all their lives, both for recreational and study purposes. When they start using computers at work, they spend a large proportion of their waking hours in front of computers, both at work and in private, which exacerbates the problems.





Finding #4

Younger people and men are less likely to seek help

Only 25% of the young respondents and male respondents had sought help for their pain

A total of 38% of the respondents had sought help for their pain. Closer examination of the results reveals two noteworthy findings. Approximately 45% of the women and respondents aged over 30 had sought help. By contrast, only about 25% of the men and younger respondents (aged 18-29) had sought help.

When those who had sought help were asked the follow-up question whether their symptoms had resolved, 36% answered yes. It is interesting to note that 41% of the men answered yes, but only 34% of the women. This means that just over 4 out of 10 men resolved their symptoms after seeking help, which suggests that if more men sought help, many Swedish males would avoid unnecessary pain.

Comments

Young people often assume that pain will resolve of its own accord and tend not to imagine the symptoms becoming a real problem. They probably don't even consider getting help.

The reason why men seek help less than women is open to speculation. We know that women are generally more likely than men to seek treatment⁴, but the reason is less clear. Men are also more prone to risk-taking and accidents than women. Perhaps this is a gender-related issue. It is possible that men are brought up to be tougher and not immediately seek help for pain. This subject is open to discussion, and there are doubtless many different reasons.

⁴ <https://www.fokus.se/2014/06/vardkvalet/>

Finding #5 There are effective solutions

71% believe that technical aids help

The respondents who had experienced pain were asked whether they had tried various technical aids such as sit-stand desks or a new mouse, chair, keyboard etc. 57% had tried some type of technical solution, and 71% of them reported that it had helped. No significant difference was found between the genders or age groups in this regard.

Comments

Using technical aids is a way of preventing pain. It is important to maintain a correct ergonomic posture, for instance by using a good desk and chair as well as tools such as an ergonomic mouse. Needless to say, we at Mousetrappere are delighted that our products can make a positive difference. However, we also know that many people are still unaware that there are technical aids that can solve their problems. Both employers and health practitioners have a duty to inform people about solutions that can improve productivity, health and well-being in the longer term.

In our study, 84% of the respondents had tried using a sit-stand desk and 54% had tried a new mouse. 35% had tried a new chair and keyboard, while 16% reported having tried other solutions (multiple responses were permitted).



Mousetrapper's mission – Fight the Pain.™

More and more of us spend our working days sitting in front of a screen. We sit still for too long in static positions that our bodies are not designed for. Many of us suffer from pain in our arms, shoulders and neck.

At Mousetrapper, we have a mission: No one should suffer pain due to working in an awkward position with a mouse.

The first Mousetrapper was launched in 1994 by Swedish inventor Rolf Strömberg. The ingenious design of this ergonomic mouse improves productivity and naturally encourages a correct

position where the arm is not overextended. This dramatically reduces risk of arm, shoulder and neck pain.

The Mousetrapper's enormous success has made it the market leader in Scandinavia, and it is now being launched internationally. We now know, along with most ergonomics specialists and physiotherapists, that the strain of desk work can be avoided. This study shows that a combination of physical exercises, correct positioning and posture and technical aids are crucial in preventing unnecessary pain when working at a computer.





Tips and solutions that help

There are many things you can do to prevent pain when working at a computer. The basic thing to remember is that a static position is likely to result in problems sooner or later. Small, static and repetitive movements can cause adverse effects. A common early warning sign is muscle fatigue.

Frequent breaks, small, simple exercises and ergonomic solutions reduce the risk of developing unnecessary arm, shoulder or neck pain. Here are some useful tips. Visit www.mousetrapper.se for more tips and exercises.

Small breaks make a big difference

All working positions risk becoming static, so it is crucial to take frequent micro-breaks. This allows the muscles to relax and recover. Try stretching and taking a brief walk.

Ergonomic exercises

Here are a few simple exercises:

Stretch your arms out in front of you, put your hands together and stretch your shoulders apart. Hold for 5-15 seconds.

Splay your fingers and clench your fists repeatedly. Repeat 10 times with each hand and notice the tension release.

To ease tired legs, rest your feet on the floor and raise your heels. Repeat up to 20 times.

To prevent shoulder pain, stand in a door opening with your right leg in front of your left. Place your right hand (or your left one if you are left-handed) in the small of your back with the palm outwards. Rest the back of your elbow against the door frame and stretch gently for 5-10 seconds by leaning your upper

body backwards. This should push your elbow forwards. Relax and repeat a couple of times.

Ergonomic solutions

Mousetrapper is designed to encourage a natural ergonomic position where the arm is not overextended. This dramatically reduces risk of arm, shoulder and neck pain.

Using a sit-stand desk has many benefits. You can easily optimise your sitting height by ensuring that your elbows are at the same height as the desk when you sit in a relaxed position with a straight back. The most obvious benefit of a sit-stand desk is that you can easily alternate between sitting and standing to vary your position. You activate more muscles when standing up, especially if you shift your weight from foot to foot every now and then. A useful tip is to work standing up immediately after lunch, which aids digestion.

Sit correctly and use an adjustable chair. A slightly forward-leaning position is ideal. Rest your feet firmly on the floor and make sure your lower back and underarms are well supported.



Summary

We spend a large proportion of our working hours in front of a computer screen. And the fact that 1.9 million Swedes report having felt pain when working at a computer suggests that this is a national health problem.

Meanwhile, many people lack knowledge of how computer work affects health and how to avoid negative consequences such as arm, shoulder and neck pain. A debate is needed about how we address this problem, for instance in the form of preventative measures, technical solutions, treatments and sick pay.

We hope this study will provide insights that contribute to greater awareness and understanding of how post-industrial workplaces can be optimised.







www.mousetrapper.com