

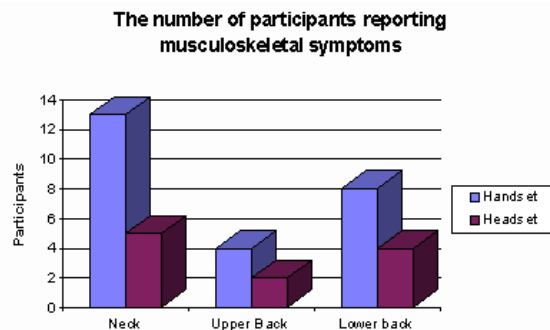


New study of telephone users by Surrey University shows 50% of participants suffered neck pain

Thousands of office workers at risk from neck pain, back pain and headaches if on phone for just two hours a day.

Hundreds of thousands of people who regularly use a phone and a computer at work are likely to be suffering from musculoskeletal health problems, which results in neck pain, back pain and headaches. The first detailed study of telephone users in the office environment demonstrates that there is a measurable health risk for anyone using the phone for just two hours daily.

The researchers, from the health sciences department at Surrey University, found that 50% of office workers in their study suffered from neck pain and 31% suffered from lower back pain. All participants were using the phone for a minimum of two hours a day. Surprisingly, 65% of participants also said they suffered from headaches sometimes or frequently.



In recent years there has been a significant increase in health complaints in the lower arm, shoulder and neck, which is now as common as back pain. While 'Phone Neck' – caused by the phone being gripped between the head and shoulders leaving both hands free to use the computer or take notes – is a common complaint amongst telephone and mobile phone users, until now there has been little scientific research into this condition.

This detailed two month study analysed the postures adopted to use the telephone. All participants used the phone and computer simultaneously during their work. In a

cross-over study, each participant was monitored during a four week period using the traditional telephone handset (control condition) and four weeks with a Plantronics headset (intervention condition).

Nearly two thirds of respondents said they rarely or never had a headache when using the Plantronics headset. In addition, the research found that using a Plantronics headset reduced neck pains by 31%, lower back pain by 16% and upper back pain by 9%. Headaches were reduced by 27% when a headset was used.

Elizabeth Simpson MCSP, SRP, author of the study and a practising physiotherapist, said: "Unlike manual worker safety, the issue of occupational injury among office staff is still not taken seriously enough by employers. This is partly because the injuries caused by bad telephone habits cannot be seen and take time to manifest. This study has shown that the use of telephone headsets can reduce neck pain, back pain and headaches in subjects who use the phone and computer simultaneously for a minimum of two hours a day."

Paul Clark, International Marketing Director of Plantronics, said: "The real value of this study is that it provides a comprehensive real-life picture of the postures associated by telephone use in the daily office environment. Although legislation requires that risk assessments of computer workstations should be conducted regularly, in compliance with the 1992 DSE regulations, telephone use has been overlooked. We will be presenting this research to the Health & Safety Executive to ensure that future legislation takes telephone use into account."

Commentary by Elizabeth Simpson, Author of the Study

"Since awkward or constrained postures are associated with increased risk of musculoskeletal disorders and reduced work performance, the focus of our study was the effect of telephone use upon working postures. We observed measurable differences between the postures adopted while using a telephone receiver, compared to a telephone headset.



“Any posture which constrains the body in an awkward position puts greater pressure on the joints and muscles, as well as increasing the risk of nerve compression. Many of the postures adopted to use a telephone receiver could increase the risk of work-related musculoskeletal disorders. Perhaps the most commonly observed posture is to grip the telephone between shoulder and head, leaving both hands free to use a computer, or take notes during the call. This posture increases the risk of nerve compression in the neck and shoulder area, which could lead to a range of problems in the spine, arm and hands.

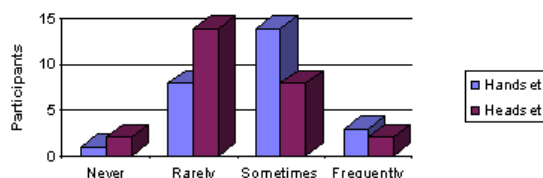
“Another potentially dangerous telephone posture involves leaning forward away from the back of the chair while taking a call. This puts greater pressure on the spine, which can cause discomfort, at worst it could lead to a cumulative disorder.

“Our participants reacted very positively to headsets, which not only provided greater comfort at work, but also led to a significant reduction in neck pain and headaches. The message for employers is that anyone who uses the telephone for a minimum of two hours a day in conjunction with a computer could benefit from a headset, which significantly improves working posture and consequently reduces risk of injury.”

Headaches were more frequent when using a handset rather than a headset

Researchers from the health sciences department at Surrey University, found that 65 per cent of participants suffered from headaches either sometimes or frequently when using a telephone handset for more than two hours a day. By comparison to 38 per cent of respondents who sometimes or frequently suffered from headaches when using a headset. Therefore, using a telephone headset reduced headaches by 27 per cent. In addition, 35 per cent of handset users said they rarely or never had headaches by comparison to 62 per cent of headset users.

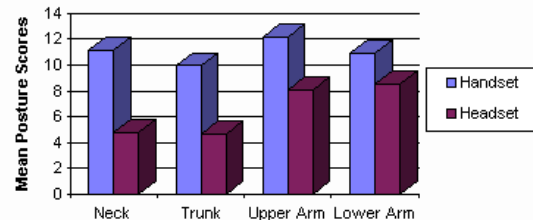
The number of participants reporting headaches



The higher the mean posture scores the greater the risk of aches and pains to muscles, joints, tendons and other soft tissue

Researchers from the health sciences department at Surrey University, observed the postures adopted by individuals involved in telephone work at computer work stations. The mean posture scores were calculated for handset and headset users as illustrated below. The higher the mean score the greater the risk of degeneration of joints, inflammation to tendons, painful muscle stiffening and disc troubles.

The difference between handset and headset mean posture scores for neck, trunk, lower and upper arm.



Notes

The study took place at four organisations based in central London over a period of two months. The 26 participants were from a variety of occupational groups: legal secretarial; computer support; personal assistant; financial and administration. Ages ranged from 18-57 years with an average age of 33.

They used the telephone for an average of 2.6 hours and no less than two hours as a normal part of their daily work routine. In a crossover study, each participant was monitored during a four week period using the traditional telephone receiver (control condition) and four weeks with a Plantronics headset (intervention condition).

Throughout this period the participant’s working postures were observed, although participants were not aware they were being watched. The effects of using both telephone receiver and headset upon neck, back, upper and lower arm posture were monitored. In addition, participants were also asked to fill in regular questionnaires, detailing any changes in their physical comfort at work.