

## Focus Group report

One focus group with 8 mixed gender participants was conducted in Cyprus.

Most of the participants identified neck pain as their main problem. Muscle tightness, muscle spasm and muscle soreness was another frequently mentioned complaint. Arm and upper extremity problems were not a problem in this cohort. One participant mentioned some forearm pain due to the desk pressure on the forearm muscles but did not relate it with the neck complaints. Muscle tightness and occasional muscle pain was reported in the area of upper trapezius and between the shoulder blades. Headaches were present in some of the cases especially after prolonged hours in front of the computer. One of the participants reported discomfort in the area of TMJ.

Neck tightness and stiffness was a common problem. Range of movement especially in rotation was restricted in some participants. Others would release this during driving and reversing their car but some mentioned having restrictions at work especially during an intense episode.

Severity of the complaints varied across the year and most of the participants reported episodic appearance of their neck problem. All but one reported they were experiencing problems such as neck and upper back pain at the time of the interview but none of them reported being in a serious episode. At least two had more serious episodes in the past and one of the participants reported numbness in the right upper extremity in the past which resolved with several sessions of Physiotherapy. Complaints depended on the time spent in their desk and intensity tended to be less on holidays and days with less workload.

Some of the participants reported that their neck problem was significant enough to affect their work. All of them agreed that it affects their productivity at work as they need to frequently interrupt their routine to relieve the symptoms. Others reported lack of concentration due to the mental effort to keep the upright posture which seemed to prevent worsening. Stress, anxiety and fatigue were some of the words used to describe the effect of the neck symptoms on their behavior which frequently led to headaches. Frequent tension with other colleagues was cited as an outcome of having the constant muscle spasm around the neck. Despite some of the participants mentioned they learned how to live with the pain they recognize they would spend more time working in their desk if they didn't have the pain. Interruption of sleep was another problem cited and difficulty with driving especially reversing the car. None of them reported having any problems when they are on remission of the episode. Absence from work was rare in this cohort but some of the participants reported having lost some of their productivity since the neck complaints started. Fear of pain and fear of worsening the neck symptoms prevented some of the participants to do other things they wanted e.g exercise in the gym.

Poor sitting habits, short desk and relatively high chair, forward head posture and slumped sitting were identified as the main working habits affecting the problem. Most of the participants recognized that passively flexed or slumped posture was a provoking or precipitating factor of their neck complaint. Most of them emphasized the importance of desk ergonomics such as the placement and height of the computer screen, height of the

desk and height of the back of the chair. Some of them reported they prefer long back in their chair some shorter. Turning the head to one side to look at the computer screen was reported to be provocative for neck pain and muscle tightness. Leaning forward during computer work was also cited as provocative. Long hours at the office in front of the computer increases neck complaints. Blind typing was considered important as “you don’t have to flex your neck”. Those of the participants that had to look at the keyboard during typing felt that it increased their symptoms. Talking on the phone and typing was also cited as provoking due to the need for neck side flexion to hold the phone.

Stretching exercises, massage and frequent interruption of sitting was the most common way they found to relieve their pain. Stretching the neck in flexion and rotation provided relief in most participants. Self - massage of the upper trapezius was also listed as relieving. Long walks around the building were helpful in relieving the muscle tension and the psychological stress at the same time. Simple neck movements were mentioned by few participants as another measure to relieve pain. One participant mentioned aerobic exercises were helpful in the past but she is unable to continue due to her schedule. Exercises for back extensors were suggested as helpful as the participants felt they would allow them to sit more upright. Other less frequent ways for pain relief were hot shower in the morning, stress management, swimming, pain killers and NSAIDs, missing days of work, change of chair and desk and pain soothing creams.

When participants were asked what provokes their pain all replied that prolonged sitting in the desk is the main cause of their pain especially so for those who complained about their desk ergonomics. Other causes mentioned were the number of pillows or the condition of their mattress. Air condition (cooling) was considered unfavorable as well. Only one of the participants identified neck degeneration and osteophytes as a contributing factor. Psychological stress makes the problem worse and can provoke muscle tension. Some of them felt that exercise was helpful and they stated they feel remission of their symptoms when they exercise regularly. However one of the participants mentioned that extreme muscle strengthening in the past could have caused him the neck problems. On the contrary others felt that they need muscle strengthening as their neck feels weak.