

ABSTRACT

Background: Smartphones are currently not only used for calling or sending electronic messages but can also be used to play online games. This attracts the attention of many people, especially teenagers aged 15-19 years. Smartphones that are used continuously by using fingers to click, swipe, scroll, tap and press will increase pressure on the median nerve and have the risk of causing carpal tunnel syndrome.

Objective: To determine the relationship between length of time and frequency of playing online games on smartphones with subjective complaints of carpal tunnel syndrome in class XII SMA N 4 Jambi.

Methods: This research is a quantitative analytic study with a cross sectional design. Respondents consisted of 75 class XI students of SMAN 4 Jambi who played online games on smartphones and were taken by purposive sampling method and met the inclusion and exclusion criteria. Data on length of time and frequency of playing online games on smartphones as well as subjective carpal tunnel syndrome complaints were assessed using a questionnaire. Analysis of the relationship between the two variables was tested with the chi-square test and processed with SPSS version 25.

Results: The results showed that there was a significant relationship between the length of time playing online games on smartphones and subjective complaints of carpal tunnel syndrome ($p = 0,001$), and also found a significant relationship between the frequency of playing online games on smartphones and subjective complaints of carpal tunnel syndrome ($p = 0,002$).

Conclusion: The longer and more often playing online games on smartphones will increase the occurrence of subjective complaints of carpal tunnel syndrome in class XII SMA N 4 Jambi.

Keywords: *online games on smartphones, CTS*

ABSTRAK

Latar belakang: *Smartphone* saat ini bukan hanya digunakan untuk menelfon maupun mengirimkan pesan elektronik tetapi bisa juga digunakan untuk bermain game online. Hal tersebut menarik perhatian banyak orang terutama remaja usia 15-19 tahun, *Smartphone* yang dipakai secara terus menerus dengan menggunakan jari-jari untuk mengklik, geser, gulir, ketuk dan tekan akan meningkatkan tekanan pada *nervus medianus* dan berisiko menyebabkan terjadinya *carpal tunnel syndrome*.

Tujuan: Mengetahui hubungan antara lama waktu dan frekuensi bermain game online pada *smartphone* dengan keluhan subjektif *carpal tunnel syndrome* pada siswa kelas XI SMAN 4 Kota Jambi.

Metode: Penelitian ini merupakan penelitian analitik kuantitatif dengan desain *cross sectional*. Responden terdiri dari 75 siswa kelas XI SMAN 4 Kota Jambi yang bermain game online pada *smartphone* dan diambil dengan metode *purposive sampling* serta telah memenuhi kriteria inklusi dan eksklusi. Data lama waktu dan frekuensi bermain game online pada *smartphone* serta keluhan subjektif *Carpal tunnel syndrome* dinilai menggunakan kuisioner. Analisis hubungan antara dua variabel diuji dengan uji *chi-square* dan diolah dengan SPSS versi 25.

Hasil: Hasil penelitian didapatkan adanya hubungan yang signifikan antara lama waktu bermain game online pada *smartphone* dengan keluhan subjektif *carpal tunnel syndrome* ($p = 0,001$), dan juga didapatkan hubungan yang signifikan antara frekuensi bermain game online pada *smartphone* dengan keluhan subjektif *carpal tunnel syndrome* ($p = 0,002$).

Kesimpulan: Semakin lama dan sering seseorang bermain game online pada *smartphone* maka akan meningkatkan terjadinya keluhan subjektif *carpal tunnel syndrom* pada siswa kelas XI SMAN 4 Kota Jambi.

Kata kunci: game online pada *smartphone*, CTS