

## **HUBUNGAN *INTERNET GAMING DISORDER* DENGAN KEJADIAN NYERI KEPALA PADA ANAK SEKOLAH DASAR DI YOGYAKARTA**

Naufal\*, Cempaka Thursina Srie Setyaningrum\*\*, Subagya\*\*

\*Residen Neurologi, Fakultas Kedokteran, Kesehatan Masyarakat, dan Keperawatan, Universitas Gadjah Mada

\*\*Staf Departemen Neurologi, Fakultas Kedokteran, Kesehatan Masyarakat, dan Keperawatan, Universitas Gadjah Mada

### **INTISARI**

**Latar Belakang:** Dewasa ini, internet merupakan hal pokok yang tidak bisa dihilangkan dalam kehidupan manusia. Penggunaan internet, terutama untuk bermain game sangat marak dikalangan anak-anak. Aktivitas *gaming* yang berlebihan dapat mengakibatkan gangguan yang disebut *Internet Gaming Disorder*, dimana dampaknya sangat beragam pada populasi anak-anak, salah satunya adalah dampak fisik seperti nyeri kepala.

**Tujuan:** Mengetahui hubungan *Internet Gaming Disorder* dengan kejadian nyeri kepala pada anak sekolah dasar di Yogyakarta.

**Metode:** Studi potong lintang pada anak usia 10 - 13 tahun di Donokerto, Sleman. Penilaian *Internet Gaming Disorder* dengan menggunakan kuisioner *Game Addiction Scale-7* (GAS-7) yang sudah divalidasi di Indonesia. Asesmen nyeri kepala dengan menggunakan kuisioner terstruktur sesuai diagnosis *International Classification of Headache Disorders III* (ICHD-III). Analisis statistik mencakup analisis bivariat dan regresi logistik multivariat.

**Hasil:** Didapatkan 282 subjek anak dengan median usia 11 tahun. Prevalensi IGD ditemukan pada 100 subjek (35,5%). Kejadian nyeri kepala pada kelompok IGD sebesar 43 orang (43,9%). Analisis bivariat menunjukkan hubungan signifikan antara IGD dengan nyeri kepala ( $p=0,031$ ) dan derajat nyeri kepala ( $p=0,049$ ). Namun, analisis multivariat menunjukkan hanya durasi permainan  $>3$  jam/hari yang berpengaruh secara independen terhadap nyeri kepala ( $p=0,014$ ,  $OR=1,882$ ), sedangkan IGD tidak signifikan secara statistik ( $p=0,458$ ).

**Kesimpulan:** *Internet Gaming Disorder* tidak berhubungan dengan kejadian nyeri kepala pada anak sekolah dasar di Yogyakarta secara independen.

**Kata kunci:** *Internet Gaming Disorder*, nyeri kepala, anak

Korespondensi: Naufal

Email: [naufal.fain@gmail.com](mailto:naufal.fain@gmail.com)

## THE RELATIONSHIP BETWEEN *INTERNET GAMING DISORDER* AND THE INCIDENCE OF HEADACHES AMONG ELEMENTARY SCHOOL STUDENTS IN YOGYAKARTA

Naufal\*, Cempaka Thursina Srie Setyaningrum\*\*, Subagya\*\*

\*Neurology Resident Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada

\*\*Staff of Neurology Department, Faculty of Medicine, Public Health, and Nursing, Universitas Gadjah Mada

### ABSTRACT

**Background:** Nowadays, the internet is an essential element of human life. Internet use, particularly for gaming, is highly prevalent among children. Excessive gaming activities can lead to a condition known as Internet Gaming Disorder (IGD), which has various impacts on the pediatric population, including physical consequences such as headaches.

**Objective:** To determine the relationship between Internet Gaming Disorder and the incidence of headaches among elementary school children in Yogyakarta.

**Methods:** A cross-sectional study was conducted on children aged 10–13 years in Donokerto, Sleman. Internet Gaming Disorder was assessed using the Game Addiction Scale-7 (GAS-7) questionnaire, which has been validated in Indonesia. Headache assessment was performed using a structured questionnaire based on the International Classification of Headache Disorders III (ICHD-III) diagnostic criteria. Statistical analysis included bivariate analysis and multivariate logistic regression.

**Results:** A total of 282 subjects were recruited with a median age of 11 years. The prevalence of IGD was found in 100 subjects (35.5%). The incidence of headaches in the IGD group was 43 subjects (43.9%). Bivariate analysis showed a significant relationship between IGD and the occurrence of headaches ( $p=0.031$ ) as well as the severity of headaches ( $p=0.049$ ). However, multivariate analysis revealed that only a gaming duration of  $>3$  hours/day was independently associated with headaches ( $p=0.014$ ,  $OR=1.882$ ), while IGD was not statistically significant ( $p=0.458$ ).

**Conclusion:** Internet Gaming Disorder is not independently associated with the incidence of headaches among elementary school children in Yogyakarta.

**Keywords:** Internet Gaming Disorder, headache, children

Correspondence: Naufal

Email: [naufal.fain@gmail.com](mailto:naufal.fain@gmail.com)