

ABSTRACT

Parental Educational Video Intervention for Screen Time Reduction in 12-36 Months Old Children

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Background: Screen time exposure at an early age has a negative effect on a child's development. Most parents have no perception of the consequences of screen time and recommendation for early age. Video-based educational intervention is expected to reduce screen time duration better than conventional education.

Objectives: Proving that parent education video intervention can reduce screen time in early age children.

Methods:

This study consists of two stages. The first is the development of educational videos based on screen time recommendation by the Indonesian Pediatrics Society (IPS) and American Academy of Pediatrics (AAP). The second stage is a study with a randomised control trial design on children aged 12-36 months who have screen time exposure that exceed the recommendations. Subject's parents accepted education based on IPS and AAP recommendations. Parents of the intervention group subjects accepted verbal education and four video-based educational series at one-day intervals, while the control group accept conventional verbal education. All subjects were followed for one month and evaluated for screen time exposure at one week and one month after completion of the intervention program. The data was analyzed using Mann-Whitney and Chi-Square test.

Results: The developed video was valid for conseling the parents with Aiken V index value is 0,75-0,83. There were 80 subjects participated in this study divided into 40 intervention groups and 40 control groups. There were 3 subjects in the control group and 2 subjects in the intervention group did not complete the participation. There was a significant difference in the delta duration of screen time before and one month after the intervention between the intervention group and the control group with $p = 0.019$. One month after the intervention, avoiding screen time while eating as recommended was significantly higher in the video intervention group (65% vs 35%, RR, 2.51 [95% CI, 1.01–6.19]), $p = 0.044$. There was no significant difference in the practice of screen time 1 hour before going to bed between the two groups. Screen time implementation according to the recommendations was significantly higher in the video intervention group (57.5% vs. 32.5%, RR, 2.81 [95% CI, 1.13-6.99]), $p = 0.025$.

Conclusions: Educational video interventions for parents can reduce screen time better than conventional education in early childhood. Educational videos can be used as a means of supporting the provision of education to parents along with verbal education carried out in daily clinical practice.

Keywords: screen time, video education, early age children

INTISARI

Intervensi Video Edukasi Orang Tua untuk Mengurangi *Screen Time* pada Anak Umur 12 – 36 Bulan

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Latar Belakang: Paparan *screen time* pada usia dini dapat memberikan dampak merugikan bagi perkembangan anak. Banyak orang tua belum memahami tentang konsekuensi dari paparan *screen time* dan bagaimana seharusnya rekomendasi yang tepat pada anak usia dini. Intervensi edukasi berbasis video diharapkan dapat menurunkan durasi *screen time* lebih baik dibandingkan dengan edukasi konvensional.

Tujuan: Membuktikan intervensi video edukasi orang tua dapat mengurangi *screen time* pada anak usia dini.

Metode: Penelitian ini terdiri atas dua tahap. Tahap pertama adalah pengembangan video edukasi *screen time* berdasarkan rekomendasi dari Ikatan Dokter Anak Indonesia (IDAI) dan *American Academy of Pediatrics* (AAP). Tahap kedua adalah penelitian dengan desain *randomised control trial* pada subjek anak usia 12-36 bulan yang memiliki paparan *screen time* melebihi rekomendasi. Orang tua subjek menerima edukasi berdasarkan rekomendasi IDAI dan AAP. Orang tua subjek kelompok intervensi menerima satu kali edukasi verbal dan empat seri edukasi berbasis video dengan interval satu hari, sedangkan kelompok kontrol menerima satu kali edukasi konvensional verbal. Semua subjek penelitian diikuti selama satu bulan dan dievaluasi paparan *screen time* pada satu minggu dan satu bulan setelah program intervensi selesai. Data dianalisis menggunakan uji Mann-Whitney dan Chi-Square.

Hasil: Video yang dikembangkan valid untuk digunakan sebagai sarana edukasi orang tua dengan nilai indeks Aiken V 0,75-0,83. Sebanyak 80 subjek mengikuti penelitian ini terbagi menjadi 40 kelompok intervensi dan 40 kelompok kontrol. Sebanyak 3 orang kelompok kontrol dan 2 orang kelompok intervensi tidak mengikuti penelitian sampai selesai. Didapatkan perbedaan bermakna dalam selisih durasi *screen time* pre dan satu bulan pascaintervensi antara kelompok intervensi dan kelompok kontrol dengan $p=0,019$. Praktik *screen time* saat makan yang sesuai rekomendasi pada satu bulan pascaintervensi signifikan lebih tinggi pada kelompok intervensi video (65% vs 35%, RR, 2,51 [95% CI, 1,01-6,19]), $p=0,044$. Tidak didapatkan perbedaan bermakna dalam praktik *screen time* 1 jam sebelum tidur di antara dua kelompok. Praktik *screen time* sesuai rekomendasi signifikan lebih tinggi pada kelompok intervensi video (57,5% vs 32,5%, RR, 2,81 [95% CI, 1,13-6,99]), $p=0,025$.

Simpulan: Intervensi video edukasi orang tua dapat mengurangi *screen time* dengan lebih baik pada anak usia dini dibandingkan edukasi konvensional verbal. Video edukasi dapat digunakan sebagai sarana penunjang pemberian edukasi orang tua bersama dengan edukasi verbal yang dilakukan di praktik klinik sehari-hari.

Kata kunci: *screen time*, video edukasi, anak usia dini

