# Pengaruh warna komposit resin nano aktivasi sinar terhadap kekerasan permukaan dasar = Effect of shades on the undersurface microhardness nanofilled light cured resin composite

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Abstrak

Tujuan penelitian ini adalah melihat kekerasan permukaan dasar komposit resin aktivasi sinar yang berbeda warna. Tiga kelompok spesimen komposit resin warna terang (B1), sedang (A3), gelap (C3) dari Z250XT, 3M ESPE (USA) berbentuk silinder dipolimerisasi menggunakan LED light curing unit. Uji kekerasan dilakukan menggunakan Knoop Microhardness Tester. Hasil menunjukkan bahwa komposit resin warna terang (B1), sedang (A3) dan gelap (C3), berurutan, 82,4+1.1 KHN, 75,9+1.2 KHN dan 65.9+1.91 KHN. Terdapat perbedaan bermakna (p<0,001) antara masing-masing kelompok spesimen komposit. Disimpulkan bahwa terdapat perbedaan kekerasan permukaan dasar komposit resin antara warna yang berbeda.

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The objective of the present study was to observe the undersurface microhardness of nanofilled light-cured resin composites of different shades. Three groups of specimens are used, light-shade(B1), medium-shade(A3), and dark-shade(C3) from Z250XT,3M ESPE-USA in the silinder form which later polymerized using LED light curing unit. The microhardness was tested using Knoop Microhardness Tester. The microhardness test result of light (B1), medium (A3), and dark shade (C3), 82,4+1.1 KHN, 75,9+1.2 KHN and 65.9+1.91 KHN respectively. The result showed a significant difference (p<0,001) between each group. The study proved difference undersurface microhardness between different shades of resin composite.