

# Akurasi Fotografi dengan Smartphone sebagai Alat Skrining Karies Gigi Permanen (Uji Validitas dan Reliabilitas Berbasis Sekolah) = The Accuracy of Smartphone Photography as A Screening Tool for Dental Caries on Permanent Teeth (School-Based Validity and Reliability Test)

Bunga Hasna Adilah, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=9999920523310&lokasi=lokal>

---

## Abstrak

Metode deteksi karies menggunakan pemeriksaan visual secara langsung terkadang menjadi hambatan pada skrining karies gigi, terutama jika dilakukan dalam komunitas besar seperti pada basis sekolah, di tambah dengan pandemi virus Covid-19. Smartphone photography dapat menjadi alat alternatif untuk deteksi karies gigi pada program skrining karies gigi jarak jauh berbasis sekolah sehingga dapat mengurangi kebutuhan sumber daya manusia, alat, bahan, dan dana serta memperluas jangkauan sekolah yang terjangkau. Tujuan penelitian ini adalah untuk mengetahui sensitivitas, spesifisitas, akurasi, dan reliabilitas penggunaan smartphone photography sebagai alat deteksi karies gigi pada murid Sekolah Menengah Pertama (SMP). Penelitian ini adalah studi cross-sectional yang tergolong dalam studi observasional deskriptif. Penelitian ini melakukan analisis uji diagnostik terhadap smartphone photography dibandingkan dengan metode pemeriksaan visual secara langsung untuk deteksi karies gigi permanen. Hasil penelitian menunjukkan smartphone photography merupakan alat yang sensitif, spesifik, akurat, dan reliable untuk deteksi karies gigi permanen sebagai alternatif pada program skrining gigi dan mulut jarak jauh. Dengan pemberian informasi dan pelatihan sederhana, siswa SMP Nugraha Bandung cukup mampu untuk melakukan prosedur pengambilan foto intra oral menggunakan kamera smartphone untuk kebutuhan pemeriksaan karies gigi jarak jauh.

.....Direct visual examination sometimes becomes an obstacle for dental caries screening, especially if it is carried out in large communities such as on a school basis, coupled with the Covid-19 pandemic. Smartphone photography can be an alternative tool for detecting dental caries in school-based remote screening programs. This method can reduce the need for human resources, tools, materials, and funds as well as expanding the reach of schools that are examined. The purpose of this study was to determine the sensitivity, specificity, accuracy, and reliability of smartphone photography as a screening tool for dental caries in junior high school students. This research is a cross-sectional study which is classified as a descriptive observational study. This research analyzes the diagnostic accuracy of smartphone photography compared to the direct visual examination method for detecting dental caries on permanent teeth. The results showed that smartphone photography is a sensitive, specific, accurate, and reliable tool to detect dental caries on permanent teeth, and can be used as an alternative for a school-based remote dental screening programs. By providing simple information and training, students at SMP Nugraha Bandung are quite capable to take intra-oral photos using smartphone camera.