

## **ABSTRACT**

**Background:** Radiography is an important tool to visualize the abnormalities that cannot be seen in clinical examination, before undergo rontgen examination clinical student should understand which type of radiography that is suitable for the case. Computed radiography has advantages of faster image reading, adjustable contras, adjustable density and sensitivity, and wider dynamic range whereas in conventional radiography, film development process is using developing and fixing substance that can only be done in a dark room with special lightning and specific temperature.

**Research Objectives:** Aim of this study is to determine the description of radiography utilization in conventional and computed radiography (CR) with periapical technique in RSGM UMY.

**Research Methods:** This is a descriptive observational study with cross-sectional design. The subject chosen for this research were clinical year student of 2013. There were 88 clinical student as respondents. The data analysis using descriptive as frequency distribution. The instrument used in this study is radiography utilization form.

**Result:** The result of this study shows that computed radiography shows that computed radiography is mainly used by the clinical student year 2013 at RSGM UMY the usage for diagnose is (91,5%), the usage as a supporting treatment is (100,0%), and the usage as post treatment evaluation is (90,1%).

**Conclusion:** Most of the clinical student year 2013 at RSGM UMY mainly uses the computed radiography (90,9%) rather than the conventional one.

**Keywords:** The utilization of radiography, Computed radiography, Conventional radiography

## INTISARI

**Latar Belakang:** Radiografi sangat penting terutama untuk melihat adanya kelainan-kelainan yang tidak tampak dapat diketahui secara jelas, sebelum melakukan rontgen mahasiswa koas harus mengetahui jenis radiografi yang sesuai. *Computed radiography* memiliki pembacaan hasil citra yang lebih cepat dan dapat diatur tingkat kontras, densitas serta sensitifitas dan *dynamic range* yang lebih luas sedangkan radiografi konvensional film harus diolah dalam larutan *developing* dan *fixing* sehingga hanya bisa dilakukan diruangan gelap dibawah pencahayaan dan suhu tertentu.

**Tujuan Penelitian:** Untuk mengetahui gambaran pemanfaatan radiograf secara konvensional dan *computed radiography* dengan teknik periapikal di Rumah Sakit Gigi dan Mulut UMY.

**Metode Penelitian:** Jenis penelitian ini adalah observasional deskriptif dengan desain penelitian *cross sectional*. Subjek penelitian adalah mahasiswa profesi angkatan 2013 di RSGM UMY. Responden peneliti berjumlah 88 mahasiswa. Analisis data menggunakan analisis data deskriptif berupa distribusi frekuensi. Instrumen penelitian menggunakan lembar blangko.

**Hasil Penelitian:** Hasil penelitian ini menunjukkan bahwa *computed radiography* lebih banyak digunakan daripada radiografi konvensional oleh mahasiswa profesi angkatan 2013 di RSGM UMY yaitu untuk menegakkan diagnosis sebesar (91,5%), untuk menunjang perawatan sebesar (100,0%), dan untuk mengevaluasi pasca perawatan sebesar (90,1%).

**Kesimpulan:** Sebagian besar mahasiswa profesi angkatan 2013 di RSGM UMY lebih memilih menggunakan *computed radiography* daripada radiografi konvensional yaitu sebesar (90,9%).

**Kata Kunci:** Pemanfaatan radiograf, *computed radiography*, radiografi konvensional.