

## INTISARI

Kontrasepsi hormonal pil, suntik dan implan merupakan jenis kontrasepsi yang banyak diminati oleh pasangan usia subur di Indonesia. Ketiga jenis kontrasepsi ini mengandung hormon seks sintesis berupa estrogen dan progesteron yang dapat meningkatkan cairan sulkus gingiva dan memicu pelepasan sitokin TNF- $\alpha$  sehingga mengakibatkan gingivitis. Penelitian ini bertujuan untuk mengetahui perbedaan kadar TNF- $\alpha$  cairan sulkus gingiva pada penderita gingivitis pengguna kontrasepsi pil, suntik dan implan.

Penelitian ini menggunakan desain penelitian *observasional analytic* dengan rancangan penelitian *cross sectional*. Subyek penelitian sebanyak 60 wanita dengan usia 25-28 tahun yang terbagi dalam 20 kelompok pil, 20 suntik dan 20 implan di kecamatan Kebonarum Klaten. Penelitian ini diawali dengan pengukuran gingival indeks kemudian pengambilan cairan sulkus gingiva menggunakan *absorbent paper point* lalu dilakukan penghitungan kadar TNF- $\alpha$  menggunakan metode ELISA.

Hasil penelitian dengan uji statistik didapatkan tidak terdapat perbedaan yang bermakna ( $p > 0,05$ ). Meskipun demikian, rerata kadar TNF- $\alpha$  cairan sulkus gingiva penderita gingivitis sedang pengguna kontrasepsi implan lebih tinggi dibandingkan dengan kontrasepsi suntik dan pengguna kontrasepsi suntik lebih tinggi dari pil.

Berdasarkan penelitian ini dapat disimpulkan bahwa tidak terdapat perbedaan kadar TNF- $\alpha$  cairan sulkus gingiva pada penderita gingivitis pengguna kontrasepsi pil, suntik dan implan.

Kata kunci: Kontrasepsi pil, suntik, implan, gingivitis, TNF- $\alpha$ .

## ABSTRACT

Hormonal contraceptive pills, injections and implants are different types of contraception are much in demand by couples of reproductive age in Indonesia. The three types of contraceptives contain synthetic sex hormones such as estrogen and progesterone that may improve gingival sulcus fluids and trigger the release of cytokines TNF- $\alpha$ , resulting in gingivitis. This study aims to determine differences in levels of tumor necrosis alpha (TNF- $\alpha$ ) crevicular fluid gingival in patients with gingivitis injectable contraceptive pills and implants..

This research used analytical observational research design by using cross sectional research design. The subjects of the research as many as 60 women aged 25-28 years, who were divided into 20 individual in the group of the user pills, 20 user injection and 20 user implant in district Kebonarum Klaten. This research began with the assessment of gingival index (GI), and follow of TNF- $\alpha$  levels crevicular gingival fluid. Then, the number of TNF- $\alpha$  levels was calculated by ELISA method.

The results of a study with a statistical test found no significant difference ( $p>0,05$ ). Nevertheless, the mean serum TNF- $\alpha$  gingival sulcus fluid gingivitis patients were implanted contraceptive users is higher than contraceptive injection and contraceptive injection is higher than pills.

Based on this research can be concluded that there are no differences in the levels of TNF- $\alpha$  gingival crevicular fluid gingivitis patients were users of contraceptive pills, injections and implants.

**Keywords:** Contraceptive pills, injections, implants, gingivitis, TNF- $\alpha$ .