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**KAJIAN VARIASI KONSENTRASI CMC-NA (*Sodium-Carboxymethyle Cellulose*)
TERHADAP pH, DAYA SEBAR, DAYA LEKAT DAN VISKOSITAS PADA
SEDIAAN GEL**

(xv + 106 halaman + 6 gambar + 13 tabel + 6 lampiran)

ABSTRAK

Latar Belakang : Stabilitas sediaan gel dipengaruhi oleh pemilihan *Gelling agent*. Salah satu *gelling agent* yg dapat digunakan adalah CMC-Na (*Sodium-Carboxymethyle Cellulose*). Tujuan dari penelitian ini adalah mengevaluasi pengaruh konsentrasi CMC-Na (*Sodium-Carboxymethyle Cellulose*) terhadap pH, daya sebar, daya lekat dan viskositas pada sediaan gel.

Metode : Penelitian ini menggunakan metode *literatur review* (studi literatur) dengan menggunakan 4 jurnal nasional dan 1 jurnal internasional dan dilakukan analisis data pada pengujian pH, daya sebar, daya lekat dan viskositas pada sediaan gel.

Hasil : Hasil penelitian menunjukkan bahwa variasi konsentrasi CMC-Na (*Sodium-Carboxymethyle Cellulose*) yang digunakan memiliki pengaruh terhadap sifat fisik sediaan gel, semakin tinggi konsentrasi CMC-Na (*Sodium-Carboxymethyle Cellulose*) yang digunakan maka semakin tinggi nilai pH, daya sebar, daya lekat dan viskositas tetapi menurunkan daya sebaranya.

Kesimpulan : Konsentrasi CMC-Na (*Sodium-Carboxymethyle Cellulose*) berpengaruh terhadap pH, daya sebar, daya lekat dan viskositas pada sediaan gel.

Kata Kunci : Gel, *Gelling agent*, CMC-Na (*Sodium-Carboxymethyle Cellulose*)

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STUDY OF VARIATION CONSENTRATION OF CMC-NA NA (Sodium-Carboxymethyle Cellulose) ON pH, SPREADABILITY, ADHESION AND VISCOSITY OF GEL PREPARATION

(xv + 106 pages + 6 images + 13 table + 6 appendixies)

ABSTRACT

Background : The stability of the gel preparations is influenced by the selection of the gelling agent. One of the gelling agents that can be used is CMC-Na (Sodium-Carboxymethyle Cellulose). The purpose of this study was to evaluate, the effect of CMC-Na (Sodium-Carboxymethyle Cellulose) concentration on pH, spreadability, adhesion and viscosity of gel preparations.

Method : This study used a literature review method (literature study) using 4 national journals and 1 international journal and analyzed data on testing pH, spreadability, adhesion and viscosity in gel preparations.

The Result : The results the study showed the variations in the concentration of CMC-Na (Sodium-Carboxymethyle Cellulose) used had an influence on the physical properties of the gel preparation, the higher the concentration of CMC-Na (Sodium-Carboxymethyle Cellulose) used, the higher the pH value. Adhesion and viscosity but lowers the spreadability.

Conclusion : Concentration of CMC-Na (Sodium-Carboxymethyle Cellulose) has an effect on pH, spreadability, adhesion and viscosity.

Keyword : Gel, Gelling agent, CMC-Na (Sodium-Carboxymethyle Cellulose)