

BAB 5 SIMPULAN

5.1. Simpulan

Konsentrasi karbopol 940 yang digunakan sebagai polimer bukoadhesif mempunyai pengaruh terhadap indeks pengembangan, pH permukaan, daya perlekatan dan uji pelepasan. Karbopol 940 dapat meningkatkan daya perlekatan dan pH permukaan, serta dapat menurunkan indeks pengembangan pada konsentrasi tinggi dan menurunkan pelepasan propranolol HCl. Sedangkan CMC-Na dapat meningkatkan indeks pengembangan, pH permukaan, daya perlekatan dan pelepasan propranolol HCl. Interaksi antara karbopol 940 dan CMC-Na memberikan pengaruh menurunkan indeks pengembangan, daya perlekatan dan pelepasan. Formula optimum dari tablet bukoadhesif propranolol HCl diperoleh dengan menggunakan konsentrasi karbopol 940 28% dan CMC-Na 20% yang akan menghasilkan tablet bukoadhesif dengan respon indeks pengembangan 88,6269%, respon pH permukaan 6,1, respon uji daya melekat 6 jam dan respon fluks pelepasan 1918,28 $\mu\text{g}/\text{cm}^2/\text{jam}$ yaitu setara dengan 4,8% propranolol HCl yang tertransport kedalam membran dalam kurun waktu 15 menit. Berdasarkan hasil penelitian tersebut diperoleh profil pelepasan *in vitro* yang baik dengan waktu mula kerja obat yang cepat bila tablet bukoadhesif diformulasi tanpa adanya *backing layer* karena dalam 15 menit pengujian jumlah obat yang terlepas sudah masuk kedalam rentang fluks uji pelepasan yang dikehendaki yaitu antara 462-54.747 $\mu\text{g}/\text{cm}^2/\text{jam}$.

5.2. Alur Penelitian Selanjutnya

Ditinjau dari hasil percobaan diperoleh waktu mula kerja obat yang cepat dengan jumlah konsentrasi propranolol HCl yang terlepas masuk kedalam rentang fluks uji pelepasan, sehingga disarankan untuk penelitian formulasi selanjutnya dengan dapat mencoba meneliti formula optimum atau dapat mengubah perbandingan konsentrasi polimer untuk diperoleh mutu fisik tablet dan profil pelepasan obat mendekati standfar formula optimum yang ditetapkan.

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