

CHAPTER 5

CONCLUSION



Over all studies of microbial contamination in oral pharmaceutical preparations, the results show^{ed} rather high percentage positive of microbial contamination, including pathogen. This is because of unsanitary techniques during the process of manufacture, and also some ingredient such as gel, which is able to support growth of microorganisms.

Total aerobic microbial count of all preparations were found in the range of $1-8 \times 10^5$ microbes/ml or g, while some of them showed no bacterial growth.

Pseudomonas aeruginosa was found in three samples of fifty five tested Chloramphenicol palmitate syrup, and in seven samples of forty four gel Antacids. These figures represented 5.5% and 15.9% of those tested samples respectively. However, this pathogen was not found in tablet Antacids, Antitussis & Expectorants and Thai-native drugs. Other pathogens, Escherichia coli, Staphylococcus aureus and Salmonella spp. were not found in all tested preparations

Among liquid preparations, the lowest percentage of contamination was found in Antitussis and Expectorants i.e. 14.9% (Table 15), in ~~compare~~ to other liquid preparations

i.e. 36.4% - 54.4% (Table 12,13). This may be due to
the self-preserved by their own ingredients in the formula
as mentioned.