INTRODUCTION
"Old age is an illness in itself." - Terence.

How does one define the elderly? Philosophic arguments about this vary. Diplomatically speaking an elderly patient is one who is older than the patient to whom you are speaking. The scientific definitions of elderly have varied from 45 years to 95 years (Ellison Norig, 1975).

The main reason for variability in criteria is that the ageing process is not strictly a function of chronological age.

The elderly cannot withstand the stress of surgery and anaesthesia as well as the younger individuals. Hence the operative mortality is increased, it is more so with emergency situations (Lorban, 1971).

Pre-existing disease contributes further to reduce their adaptability to stress. Hence there is "Narrow margin of reserve in the elderly" (Ellison Norig, 1975).
These reduced physiological reserves and diminished capacities for maintaining homeostasis "not only decrease the margin of error permissible to the anaesthetist but also increase the penalties for even minor shortcomings in patient care" (Simpson et al., 1961).

Elderly patients due to their altered respiratory and circulatory physiology, very often pose many problems in pre-operative, operative and post-operative period.

Neuromuscular blocking agents have now been in clinical use for over three decades. They are indicated for production of muscular relaxation in relatively light but adequate planes of general anaesthesia.

Since the introduction of d-Tubocurarine into anaesthesiology, numerous depolarising & non-depolarising muscle relaxants have been found and tested. Relatively few survived and are currently used.

d-Tubocurarine is known for causing endogenous histamine release and may cause sudden hypotension in elderly patients, similarly gallamine has a vagolytic action, and tachycardia thus produced is not appreciated in elderly where circulatory homeostasis is already in danger.
Pancuronium is a bis-quaternary ammonium steroid with potent neuromuscular blocking activity of competitive inhibitor type.

It is a relaxant with rapid onset of action, marked potency, respiratory sparing effect, mild cardio-vagolytic effects and has a prompt, complete reversal with anticholinesterases such as neostigmine & pyridostigmine.

Hypotension following pancuronium is not common because of its low ganglionic blocking activity and absence of histamine releasing property.

Foldes (1972) remarked that in a remarkably brief span pancuronium has been measured against most scientific indices pertinent to the actions of neuromuscular blocking agents. Risk cases requiring unusually careful control of cardiovascular stability have been performed while using pancuronium as the sole relaxant.

In most clinical trials potentiating drugs such as halothane, neuroleptanalgesics etc. were used. It is because of this that mutual relaxing potencies of various agents reported in these studies are not consistent.

The numerical values reported in various investigations are not always comparable because of different experimental conditions, methods & criteria used.
There is still lack of a simple clinical appraisal of pancuronium in elderly patients. It is therefore to appraise and evaluate the effects and safety of pancuronium bromide, that this clinical study is undertaken in elderly patients with pre-existing complications. It is also intended to compare this drug with d-tubocurarine and gallamine in the same age group.