SUMMARY

BACKGROUND AND OBJECTIVES

Different studies have been carried out in Nigerian prisons. Most of these studies were on different infections and skin diseases. Studies on hypertension and cardiovascular status of inmates are scanty. Due to frequent sudden deaths in our prisons, which involve both prominent and non-prominent inmates, there is the need to evaluate the prevalence of high blood pressure (HBP) and its complications among the inmates.

SUBJECTS, MATERIALS AND METHODS

Two hundred and six inmates and two hundred and six controls were used for the study.

After a brief history and physical examinations, the anthropometric measurements of weight, height, BMI, waist/hip ratio and waist circumference were assessed. Blood pressure of all the subjects were evaluated, and repeated in those with elevated blood pressure.

Electrocardiogram, chest x-ray, blood biochemistry and urinalysis tests were conducted on all subjects.

RESULTS
55.8% of the inmates were in the 20-29 age categories, while 24.8% were in the 30 – 39 years age category. Others (19.4%) were above 40 years. 85% and 81% of the male and female inmates respectively were awaiting trial. The mean Body Mass Index (BMI), and Waist Circumference (WC) were significantly higher in controls than the inmates.

The mean arterial pressure (MAP) for male inmates and controls were $102 \pm 12$ mmHg and $100 \pm 15$ mmHg respectively. The MAP for female inmates and controls were $103 \pm 10$ mmHg and $100.3 \pm 12$ mmHg respectively. These differences were not statistically significant.

Twenty-six (19%) of the male inmate had HBP (SBP > 140 mmHg) against sixteen (11.6%) of male control. In addition, prevalence of HBP among female inmates and control were 19% and 13% respectively. These differences were not statistically significant.

Complications of HBP, which include LVH and nephropathy, were more prevalent among inmates although not statistically significant.

**CONCLUSIONS AND RECOMMENDATIONS**

Majority of the inmates were in the 20 – 29 years and 30 – 39 years age category and majority were awaiting trial.
The inmates had significantly lower BMI and WC than their controls, probably due to malnutrition and harsh living conditions.

HBP and its complications were more prevalent among the prison inmates compared to their controls although the differences were not statistically significant.

**Recommendations include,**

- Routine and regular medical evaluation for all inmates.
- Adequate treatment, for those needing medical attention.
- Improving living conditions by decongestion of cells, improving hygiene and adequate feeding.
- Improving the judicial process for more efficient determination of cases in order to decongest the prisons.