Introduction

In Nigeria, hypertension and obesity as well as their risk factors are on the increase. Civil servants by virtue of their work and lifestyle may be at risk of non-communicable diseases (NCDs).

Research objectives

- To determine the prevalence of hypertension, overweight and obesity among the civil servants
- To determine factors associated with hypertension, overweight and obesity among the civil servants

Methodology

- Cross-sectional study design
- Study period: June-August, 2012
- Study population: Civil servants from 10 ministries
- Two-stage sampling technique involving simple random sampling and cluster sampling
- Operational definitions adapted from: WHO NCDs STEPhic guidelines and CDC Chronic Disease Indicators
- Study instruments: Interviewer-administered questionnaire, sphygmomanometer, weighing scale, stadiometer
- Data collected: Socio-demographic, risk factors, anthropometric, lifestyle behaviours

Results

### Socio-demographics

- 801 respondents were recruited
- Mean age: 43.2 ± 9.0 years, with 494 (62%) males
- Overall prevalence of hypertension 29.2%, with 11.3% newly detected
- Prevalence of overweight 35.3% and obesity 27.0%

### Prevalence of behavioural risk factors

- Physical inactivity: 730 (91.1%)
- Current cigarette smoking: 290 (36.2%)
- Physical inactivity: 30 (3.8%)
- Physical inactivity: 775 (96.9%)
- Binge drinking: 15 (1.9%)
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- Higher prevalence of overweight found among: Civil servants older than 40 years (66.4% vs. 55.6%; p<0.01)
- Higher prevalence of overweight and obesity found among: Civil servants older than 40 years (66.4% vs. 55.6%; p<0.01)
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### Predictors of Raised Blood Pressure

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR (95% CI)</th>
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<tbody>
<tr>
<td>Age (years)</td>
<td>0.4</td>
</tr>
<tr>
<td>Body Mass Index (BMI)</td>
<td>2.4 (1.5 – 3.9)</td>
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<tr>
<td>Sex</td>
<td>1.0 (ref)</td>
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</tbody>
</table>

### Predictors of overweight and obesity

- Cross-sectional study design was used: Temporality and causality not established
- Self-report of lifestyle behaviours
- Possible recall bias or prevarication bias

Conclusions

- Hypertension and obesity are prevalent among civil servants in Kaduna
- Care and management of hypertensive individuals require priority; individuals with history of hypertension showed elevated blood pressure during the study period
- High prevalence of the behavioural risk factors demand multifaceted approach of management and prevention

Public Health Actions

- Feedback to State Ministries, Federal Health Ministry and National Disease Control directors
- Health education on benefits of healthy diet and physical activity to civil servants

Recommendations

- Government at state and national levels should institute age and sex-specific public health strategies to promote physical exercises at the workplace and eating of healthy diets

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