SPOT ASSESSMENT OF CKD RISK FACTORS IN A POPULATION OF TRADERS IN CENTRAL BENIN CITY

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Introduction

- The prevalence of chronic kidney disease is on the increase in Nigeria.
- There is no national screening programme for CKD.
- As part of the world kidney day activities of 2012, we proceeded to screen traders in central Benin city for the presence of CKD risk factors.
Traders in Oba market and environs in central Benin city were invited to the town hall at the Ring Road in Benin city.

Health education was given on ways of preventing CKD. Consenting individuals were screened for CKD risk factors.

Parameters obtained from participants included age, sex, height, weight, random blood sugar, urinalysis and blood pressure.

Data was analysed using SPSS16.
RESULTS AND DISCUSSION
Demographic and Clinical Characteristics

<table>
<thead>
<tr>
<th>Total Number of Patients</th>
<th>Male</th>
<th>Female</th>
<th>Mean Age (Years)</th>
<th>Mean BMI (kg/m$^2$)</th>
<th>Mean SBP (mmHg)</th>
<th>Mean DBP (mmHg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>178</td>
<td>85 (47.8%)</td>
<td>93 (52.2%)</td>
<td>42.7 ±13.1</td>
<td>25.81±4.97</td>
<td>132.72±21.53</td>
<td>89.36±14.35</td>
</tr>
</tbody>
</table>

GENDER

- Female 52.2%
- Male 47.8%
Proteinuria

Our Study: 6.2%
Ulasi et al¹: 4.3%
Ayodele et al²: 3.8%

PRESENT 6.2%
ABSENT 93.8%
Hypertension

Our Study

Studies | Our Study | Ulasi et al ¹ | Akpa et al³ | Arogundade et al⁴ | Akinkugbe OO⁵
--- | --- | --- | --- | --- | ---
| 57.3% | 42.2% | 40.82% | 37.7% | 37.7% |
Obesity

<table>
<thead>
<tr>
<th>Studies</th>
<th>Our study</th>
<th>Akpa et al$^3$</th>
<th>Ulasi et al$^1$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>3.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal Weight</td>
<td>52.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overweight</td>
<td>27.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obesity</td>
<td>16.9</td>
<td>18.46%</td>
<td>22.6%</td>
</tr>
</tbody>
</table>
Correlation between Age(years) and Systolic Blood Pressure (mmHg)

$r = 0.225, p = 0.003$
Correlation between Age(years) and Diastolic Blood Pressure (mmHg)

$r=0.167, p=0.025$
Correlation between BMI (kg/m$^2$) and Diastolic Blood pressure (mmHg)

- $r=0.318$, $p<0.001$
Correlation between BMI (kg/m²) and Systolic Blood pressure (mmHg)

- $r=0.254$, $p=0.001$
Correlation between Age, BMI and BP

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Rho</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMI Vs SBP</td>
<td>0.254</td>
<td>0.001</td>
</tr>
<tr>
<td>BMI Vs DBP</td>
<td>0.318</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Age Vs SBP</td>
<td>0.225</td>
<td>0.003</td>
</tr>
<tr>
<td>Age Vs DBP</td>
<td>0.167</td>
<td>0.025</td>
</tr>
</tbody>
</table>
CONCLUSION

- The most prevalent risk factor for CKD in the population studied was hypertension.
- We propose a nationwide hypertension survey programme to identify persons with undiagnosed hypertension as well as screening for diabetes and proteinuria.
REFERENCES


