INTRODUCTION

Non communicable diseases are more common in urban areas compare to rural areas. Cardiac diseases, diabetes mellitus and cancer are most common non-communicable diseases at global level. In cardiac diseases, hypertension is widely available in population. Hypertension (HTN) is a treatable factor which contributes to the burden of disease on economically developed and developing nations.1 According to the World health organization, 1.13 billion people worldwide have hypertension, mostly (67%) living in low- and middle-income countries they are stated that Hypertension is a major cause of premature death worldwide.2 Hypertension is one of the sneaky onset diseases that damages capillary beds in vital organs like kidney or may cause cerebral vascular accident. It is an important risk factor for many of disease that is an important cause of morbidity and mortality.3 A study concluded that Hypertension prevalence has increased among the Indian population over the past 25 years. In rural community, there was a doubling up of hypertension while in the urban area it amplified by 50%. Prevalence of hypertension according to age in rural population increased in men from 8% to 17% and in women from 7% to 12% while in an urban community that was in men from 20% to 27% and in women from 17% to 22%.4 Hypertension is also known as silent killer because it’s not identifying its early stage until a severe medical crisis place many of people are still unaware of excessive hypertension. Many of predisposing factors affect hypertension and these factors changes according to community b area like urban region having more predisposing factors as compare to rural area.7 WHO also considered the effect of urbanization on health parameter.8 Urban people are on more risk on hypertension, blood glucose obesity as compare to rural region.9 Reliable information about the prevalence of hypertension is essential to develop national and local level health strategies for the prevention and control of hypertension. Thus, this study was conducted with the objective to find out the burden of hypertensive patients on OPD services. The literature on the
prevalence of hypertension in north India, more specifically in Delhi, was scarce and thereby, the present study was undertaken to provide the data on the prevalence of hypertension amongst urban adults who were aged 18 years and above, who attended the Outpatient Department of the Safdarjung Hospital, Delhi India.

MATERIALS AND METHODS

Present study was a community based descriptive survey study conducted in Medicine OPD, covered under the Department of Medicine, VVMC, New Delhi. All people above 18 years of age attaining to OPD constituted study population. In present study, 500 subjects were included in the study. Purposive sampling was used to select study subjects. The survey containing items to assess sociodemographic profile like age, sex, identification data, education were collected by semi-structured questionnaire. Analysis and measurement of blood pressure was done by using a standard and calibrated BP apparatus. Patients were in sitting position during blood pressure measurement. Hypertensive subjects were defined as those with systolic blood pressure (SBP) equal to or more than 140 mmHg and/or diastolic blood pressure (DBP) equal to or more than 90 mmHg or those being treated for hypertension10,11. Each selected subject was given explanation about the procedure and objectives of the study. The prior ethical clearance for the study was obtained from the institutional ethics committee. Data analysis was done using SPSS version 16. The results were explained in simple proportions.

RESULT

Table 1 Socio-demographic characteristics and Prevalence of hypertension among the subjects.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Sample characteristics</th>
<th>Frequency</th>
<th>Total subjects</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>HTN</td>
<td>NON HTN</td>
<td>HTN</td>
</tr>
<tr>
<td>1.</td>
<td>AGE</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>21-30 years</td>
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<td>132</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>4</td>
<td>83</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>14</td>
<td>95</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>51-60</td>
<td>34</td>
<td>64</td>
<td>42</td>
</tr>
<tr>
<td></td>
<td>60 above</td>
<td>42</td>
<td>31</td>
<td>95</td>
</tr>
<tr>
<td>2.</td>
<td>SEX</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>44</td>
<td>210</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>51</td>
<td>195</td>
<td>95</td>
</tr>
<tr>
<td>3.</td>
<td>EDUCATIONAL STATUS</td>
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<tr>
<td></td>
<td>Illiterate</td>
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<td>124</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Primary</td>
<td>33</td>
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<td>95</td>
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<tr>
<td></td>
<td>Secondary</td>
<td>24</td>
<td>109</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Senior secondary</td>
<td>17</td>
<td>26</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>4</td>
<td>55</td>
<td>95</td>
</tr>
</tbody>
</table>

HTN- Hypertensive. NON HTN- Non hypertensive.

DISCUSSION

Non communicable diseases are increasing with great pace at global level. The health profile of the population is more affected due to non communicable diseases compare to communicable diseases. Indians have the highest rates of Coronary artery disease all over the globe. It 2-4 times higher at all ages and five to ten times higher in those below 40 years of age. Many studies have stated that Hypertension and diabetes are major causes of morbidity and mortality in Indian population12. The present study displayed that there are continuous increase burden of hypertensive patients among hospitals and the prevalence of hypertension is significantly higher. The overall prevalence of high blood pressure was 19% that is considerably higher than community primarily based studies13-18. This discrepancy might be explained in different ways in which; this study was OPD based so participants were patients, whereas the previous studies were a community based. The second reason for the discrepancy may be the age distinction within the study, population (≥ 20 years with the mean age of fifty seven. Whereas during this case were participated whereas different study enclosed aged ≥ 15 years17, 25–64 years [21] and > 31 years4. A compatible prevalence of hypertension was reported (46%) in a study which was conducted among the outdoor patients of an urban health centre of Kolkata18. The high prevalence of hypertension (44.46%) and pre hypertension (29.3%) in the present study were similar to the trends which had been reported worldwide. A similar prevalence of pre-hypertension (28.5 %) had also been reported in the study which was conducted on an adult population of the urban areas of Lucknow, India. Our study revealed that 8.5% individuals had isolated systolic hypertension. In a recent cross-sectional study which was conducted on the adult urban population of Lucknow, India the prevalence of isolated systolic hypertension was reported to be 6.2%. The proportion of hypertension, as well as the mean systolic and diastolic blood pressures, was found to increase steadily with an increase in age. An institutional study was conducted by Shatrughan Pareek et al. among Northern railway employees in Delhi.

The study communicated that prevalence of pre-hypertension and hypertension was 7.24% and 23.98% respectively, it supported the present study19. Our findings were coherent with the study conducted by Vasan et al in their study conducted among 1298 subjects found significant association of
hypertension with age. Such changes of blood pressure with age might be due to the changes in the vascular system. Cross-sectional surveys, as well as prospective observational cohort studies, have consistently demonstrated a positive relation between the age and blood pressure in most of the populations, with diverse geographical, cultural and socioeconomic characteristics. The proportion of hypertension was slightly higher among females (54%) as compared to that in males (46%) but the difference was not statistically significant. Comparable observations (44.97% in females and 42.48%) in males) were reported among the urban adults of Lucknow, India. A female preponderance was also observed by Kabir et al., among the outdoor patients of Dhaka Medical College. In contrast, a greater proportion of hypertension was observed among males (42.9%) as compared to females (34.2%), among the urban adults of Lucknow, India. The educational level might be responsible for the high prevalence of hypertension. Education make individual aware about disease Previous survey finding showing that high level education have better scenario awareness, treatment, and control rates of hypertension were higher in urban residents compared with rural residents, and low education level was associated with lower rates of awareness, treatment, and control rate of hypertension. Early management and treatment of hypertension is important to reduce the morbid conditions. Hypertension can be minimized by early diagnosis and lifestyle modifications.

CONCLUSION

Non communicable diseases are increasing with great pace in the world. Prevalence of hypertension and diabetes are increasing drastically in India. Lifestyle and genes are main reasons of hypertension in our country. Hypertension was found to be highly prevalent among the outdoor patients of an urban health centre of Safdarjung. This study projects the need of an early detection of hypertension, which can be facilitated by a periodic screening of the people, regularly at the hospital as well as at the community levels. Detection and management of hypertension in early stage is crucial for the community. Higher prevalence of hypertension can increase the morbidity and mortality in the world. Periodic screening and awareness towards hypertension is necessary to reduce the prevalence of hypertension.

What this Study Adds

A regular, periodic screening of the people, especially of the outdoor patients, at the hospital as well as at the community level, is required for an early detection and treatment of the hypertension.

The Future Scope of This Study

A larger multicentre study can be conducted at different hospitals to know the trends of the increasing blood pressure among the outdoor patients.

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Reference

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