# Prevalence of hypertension at selected area 

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#### Abstract

Majority of the participants belongs to the age group 20-40 years (60\%), gender male (56\%), have height in the range 161-171cm (35\%), weight 51-60 Kg (30\%), BMI as normal (44.25\%), BP as normal (89.8\%), RBS as normal (84.1\%). 2. There is a significant association between all the demographic variables and all the clinical variables.


Keywords-Prevalence, Hypertension

## 1. INTRODUCTION

As a part of our community health nursing departmental activity, we organized a hypertension prevalence study at areas in and around Ayanambakam covering 2000 samples. The findings of the study were as follows. Assessment of an individual helps us to find out the health status of that individual, similarly, assessment of a group of people helps us to find out the health problems prevailing among the individuals of the group. Hence we are assessing all people who are at the risk of having Malnutrition, Diabetes mellitus and Hypertension in selected wards of Thiruverkadu Municipality.

## 2. METHODOLOGY

Detection of any deviation from what is known to be normal, such as can be described in terms of, for example, anatomy (the structure of the human body), physiology (how the body works), pathology (what can go wrong with the anatomy and physiology), psychology (thought and behavior) and human homeostasis (regarding mechanisms to keep body systems in balance). We collected data using the tool with demographic variables and clinical variables. All the data was presented as follows.

## 3. RESULTS

The major findings are grouped as the following:

- Frequency and percentage distribution of demographic variables
- Frequency and percentage distribution of clinical variables
- Association between selected demographic variables and clinical variables

Table 1: Frequency and percentage distribution of demographic variables $\mathbf{N}=\mathbf{2 0 0 0}$

| S. no. | Demographic variables | $\mathbf{n}$ | $\mathbf{p}$ |
| :--- | :--- | :---: | :---: |
| 1. | Age in years |  |  |
|  | $1.1 .<20$ | 60 | 3 |
|  | $1.2 .20-40$ | 1200 | 60 |
|  | $1.3 .41-60$ | 580 | 29 |
|  | $1.4>60$ | 160 | 8 |
| 2. | Gender |  |  |
|  | 2.1. Male | 1128 | 56 |
|  | 2.2. Female | 871 | 44 |

Table 1 shows that majority of the participants belongs to the age group $20-40$ years ( $60 \%$ ) and gender male ( $56 \%$ ).

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Table 2: Frequency and Percentage distribution of clinical variables, $\mathbf{N}=\mathbf{2 0 0 0}$

| S. no. | Clinical variables | n | p |
| :---: | :--- | :---: | :---: |
| 1. | HEIGHT |  |  |
|  | $<150$ | 325 | 16.0 |
|  | $150-160$ | 659 | 33.0 |
|  | $161-170$ | 697 | 35.0 |
|  | $>170$ | 319 | 16.0 |
| 2. | WEIGHT |  |  |
|  | $<50$ | 292 | 14.6 |
|  | 51-60 | 604 | 30.2 |
|  | 61-70 | 559 | 28.0 |
|  | $>70$ | 545 | 27.3 |
| 3. | BMI |  |  |
|  | $<18$ | 79 | 3.95 |
|  | $18-24$ | 885 | 44.25 |
|  | 25-29 | 764 | 38.2 |
|  | $>30$ | 272 | 13.6 |
| 4. | BLOOD PRESSURE |  |  |
|  | Hypotension | 5 | .3 |
|  | Normal | 1796 | 89.8 |
|  | Hypertension | 199 | 10.0 |
| 5. | RANDOM BLOOD SUGAR |  |  |
|  | Hypoglycemia | 5 | .3 |
|  | Normal | 1681 | 84.1 |
|  | Hyperglycemia | 314 | 15.7 |

Data from Table 2. Shows that majority of the participants have a height in the range $161-171 \mathrm{~cm}(35 \%)$, weight $51-60 \mathrm{Kg}(30 \%)$, BMI as normal (44.25\%). BP as normal (89.8\%) and RBS as normal (84.1\%).

Table 3: Association between selected demographic variables and Height, $\mathbf{N}=2000$

| Demographic variables | $<\mathbf{1 5 0}$ | $\mathbf{1 5 0 - 1 6 0}$ | $\mathbf{1 6 1 - 1 7 0}$ | $\mathbf{> 1 7 0}$ | $\chi^{\mathbf{2}}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Age (in years) |  |  |  |  |  |
| <20yrs | 9 | 19 | 27 | 12 |  |
| $21-40 \mathrm{yrs}$ | 162 | 373 | 439 | 233 |  |
| $41-60 \mathrm{yrs}$ | 93 | 219 | 189 | 69 | 98.269 |
| $>60 \mathrm{yrs}$ | 61 | 48 | 42 | 5 | $\mathrm{df}=9$ |
|  |  |  |  |  |  |
| Gender | 42 | 224 | 563 | 300 | 739.940 |
| Male | 283 | 435 | 134 | 19 | $\mathrm{df}=3$ |
| Female | $\mathbf{p = 0 . 0 0 0}$ |  |  |  |  |

Data from table 3 shows that there was a significant association between demographic variable (age, gender) and level of their height.

Table 4: Association between selected demographic variables and Weight $\mathbf{N}=2000$

| Demographic variables | $<\mathbf{5 0}$ | $\mathbf{5 1 - 6 0}$ | $\mathbf{6 1 - 7 0}$ | $>\mathbf{7 0}$ | $\chi^{\mathbf{2}}$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Age (in years) |  |  |  |  |  |
| $<20 \mathrm{yrs}$ | 33 | 27 | 3 | 4 |  |
| $21-40 \mathrm{yrs}$ | 138 | 362 | 358 | 349 | 175.870 |
| $41-60 \mathrm{yrs}$ | 63 | 167 | 162 | 178 | $\mathrm{df}=9$ |
| $>60 \mathrm{yrs}$ | 58 | 48 | 36 | 14 |  |
| Gender |  |  |  |  |  |
| Male | 103 | 295 | 324 | 406 | 142.215 |
| Female | 189 | 308 | 235 | 139 | $\mathrm{df}=3$ |
|  | $\mathbf{p = 0 . 0 0 0}$ |  |  |  |  |

Table 4 shows that there was a significant association between demographic variable (age, gender) and level of their weight.
Table 5: Association between selected demographic variables and BMI, N = 2000
$\left.\begin{array}{llllll}\begin{array}{l}\text { Demographic } \\ \text { variables }\end{array} & <\mathbf{1 8} & \mathbf{1 8 - 2 4} & \mathbf{2 5 - 2 9} & \mathbf{> 2 9} & \chi^{\mathbf{2}} \\ \hline \text { Age (in years) } & & & & & \\ \hline<20 y r s\end{array}\right)$

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Data from table 5 shows that there was a significant association between demographic variable (age, gender) and level of their BMI.
Table 6: Association between selected demographic variables and blood pressure, $\mathbf{N}=\mathbf{2 0 0 0}$

| Demographic <br> variables | hypotension | normal | hypertension | $\boldsymbol{\chi}^{\mathbf{2}}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Age (in years) <br> $<20 \mathrm{yrs}$ | 0 | 64 | 3 | 64.958 |
| $21-40 \mathrm{yrs}$ | 3 | 1130 | 74 | $\mathrm{df}=6$ |
| 41-60yrs | 2 | 479 | 89 |  |
| 60yrs | 0 | 123 | 33 |  |
| Gender | 0 | 1015 | 113 | 6.613 |
| Male <br> Female | 5 | 780 | 86 | $\mathrm{df}=2$ |
| $\mathbf{p = 0 . 0 0 0}$ |  |  |  |  |

Table 6 shows that there was a significant association between demographic variable (age, gender) and level of their Blood Pressure.
Table 7: Association between selected demographic variables and random blood sugar, $\mathbf{N}=2000$


Data from table 7 shows that there was a significant association between demographic variable (age, gender) and level of their Random Blood Sugar.

## 4. DISCUSSION

The major findings of the camp report show that

1. Majority of the participants

- Belongs to the age group 20-40 years (60\%)
- Gender male (56\%)
- Have a height in the range $161-171 \mathrm{~cm}$ ( $35 \%$ )
- Weight $51-60 \mathrm{Kg}$ ( $30 \%$ )
- BMI as normal (44.25\%)
- BP as normal (89.8\%)
- RBS as normal (84.1\%).

2. There is a significant association between all the demographic variables and all the clinical variables.

## 5. REFERENCES

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