# Blood pressure levels: different for stream students. 

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## Background -

High blood pressure represents one of the main public health risks problems in developed as well as in developing countries. The behavior of the high blood pressure in the initial phases of life has shown a strict relationship with hypertension in adulthood. Research studies show that prevalence of high blood pressure in adolescents \& young adults varies in each country \& depends on many factors. But blood pressure values have been associated with excessive body weight, unbalanced diet, smoking etc. In addition some studies have identified other risk factors of high blood pressure. Considering high blood pressure as a multifactorial problem which affects many different population groups, it becomes crucial to identify risk factors associated with high pressure levels in adolescents \&young adults. The aim of the study was to identify blood pressure levels among different stream students.

## Title-

A study to compare blood pressure levels of different stream students.

## Objectives

- To identify blood pressure levels of different stream students
- To correlate blood pressure levels with selected demographic variables


## Method:

A design used for the study was a descriptive study design. A survey was done on total 200 students. In this study 70 students selected were from science stream, 70 from commerce stream and 60 from arts stream. Official permission was taken from administrators of the college. Each sample was explained about the study and its purpose. Written informed consent was taken from all samples before interview. Convenient sampling technique was used and samples were selected keeping in mind the criteria of the study.

## Data collection:

The study was based on the assumption that adolescents \& young adults of different stream students have different levels of blood pressure. The investigator prepared questionnaire for interview to assess demographic variables and blood pressure level. The tool was constructed according to the objectives of the study. The questionnaire consisted of two sections.
Section I dealt with the demographic variables like age, gender \& stream of the student.
Section II included clinical profile like height, weight, Body Mass Index \& blood pressure.

Information about demographic details was collected.

Weight was measured with Omron body weight scale HN-283. Weight of each subject was measured by allowing him/her to stand on the weighing scale without shoes and looking straight. Height was measured by standard measuring tape.

Blood pressure was determined by auscultating in right arm by standardized method using mercury sphygmomanometer.

## Results

Findings of the demographic data- This section deals with selected variables such as age, gender and stream of study.

Table 1
Description of sample according to personal characteristics

| N-200 |  |  |  |
| :--- | :--- | :--- | :--- |
| Sr <br> No Demographic <br> variable Frequency Percentage |  |  |  |
| 1 | Age | 100 | 50 |
|  | $16-19$ | 100 | 50 |
| $20-25$ | Gender <br>  <br>  <br>  <br> Male <br> Female | 111 | 55.5 |
| 3 | Stream of the <br> study | 70 | 44.5 |
|  | Science <br> Commerce <br> Arts | 70 | 35 |
|  | 60 | 35 |  |

Table no 1 shows that sample included in the study were $50 \%$ of adolescents and $50 \%$ of young adults. There were $55.5 \%$ of males and $44.5 \%$ were females. $35 \%$ of sample was from science stream, $35 \%$ was from commerce stream \& 30\% was from arts stream.

Findings related to Body Mass Index of different stream students


Fig no 1 BMI level of science stream students.
The above figure shows that $31.40 \%$ science students were overweight whereas $35.70 \%$ students were obese.


Fig 2 BMI level of commerce stream students.
Fig 2 shows that most of the i. e. $54.28 \%$ commerce students had normal BMI but $25.71 \%$ of the students were overweight and $1.42 \%$ were obese.


Fig 3 BMI level of arts stream students.
The above figure shows that $63.33 \%$ student had normal BMI whereas $18.33 \%$ students were overweight. $1.66 \%$ students were obese.

## Findings related to blood pressure levels of different stream students



Fig 4 Blood pressure levels of different stream students

The above figure shows that $51.4 \%$ of science stream students had normal blood pressure, $45.7 \%$ were in prehypertension stage, $2.8 \%$ were in stage I hypertension \& nobody was in stage II hypertension.

It also indicates that $54.2 \%$ of commerce stream students had normal blood pressure, $44.2 \%$ were in prehypertension stage, $1 \%$ were in stage I hypertension \& nobody was in stage II hypertension.
It also indicates that $50 \%$ of arts stream students had normal blood pressure and $50 \%$ were in prehypertension stage, nobody was in stage I and stage II hypertension.

There was no significant association seen in blood pressure levels with variables like age, gender, Body Mass Index and stream of study at P> 0.05 level.

## References

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## Findings related to correlation with

## demographic variables

