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# 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:	Frequenc	y and	percentage	distribution	of	demograph	ic variables	N =	2000

S. no.	Demographic variables	n	р
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%).

S. no.	Clinical variables	n	р
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

Senbahavalli V., Chidambaranathan; International Journal of Advance Research, Ideas and Innovations in Technology Table 2: Frequency and Percentage distribution of clinical variables, N = 2000

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

Table 5: Association D	etween sele	cteu demogra	pine variables	and neight	, N = 2000
Demographic variables	<150	150-160	161-170	>170	$\chi^2$
Age (in years)					
<20yrs	9	19	27	12	
21-40yrs	162	373	439	233	
41-60yrs	93	219	189	69	98.269
>60yrs	61	48	42	5	df = 9
Gender					
Male	42	224	563	300	739.940
Female	283	435	134	19	df = 3
		n = 0.000			

Table 3: Association between selected demographic variables and Height, N = 2000

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 N = 2000Demographic variables<50					
Demographic variables	<50	51-60	61-70	>70	$\chi^2$
Age (in years)					
<20yrs	33	27	3	4	
21-40yrs	138	362	358	349	175.870
41-60yrs	63	167	162	178	df= 9
>60yrs	58	48	36	14	
Gender					
Male	103	295	324	406	142.215
Female	189	308	235	139	df = 3

**p= 0.000** 

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					
Demographic	<18	18-24	25-29	>29	$\chi^2$
variables					
Age (in years)					
<20yrs	17	47	3	0	
21-40yrs	48	543	452	165	
41-60yrs	7	222	245	95	146.868
>60yrs	7	73	64	12	df = 9
Gender					
Male	53	553	426	96	71.181
Female	26	331	338	176	df = 3

Senbahavalli V., Chidambaranathan; International Journal of Advance Research, Ideas and Innovations in Technology 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, N = 2000						
Demographic		hypotension normal		hypertension	$\chi^2$		
	variables						
	Age (in years)						
	<20yrs	0	64	3	64.958		
	21-40yrs	3	1130	74	df= 6		
	41-60yrs	2	479	89			
	>60yrs	0	123	33			
	Gender						
	Male	0	1015	113	6.613		
	Female	5	780	86	df=2		
1	p= 0.000						

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, N = 2000

<70	70-140	>140	$\chi^2$
0	63	4	140.738*
4	1099	104	df = 6
1	412	157	
0	107	49	
2	984	142	19.921**
3	696	172	df= 2
	<70 0 4 1 0 2 3	< <b>70</b> 0 63   4 1099   1 412   0 107   2 984   3 696	<70   70-140   >140     0   63   4     4   1099   104     1   412   157     0   107   49     2   984   142     3   696   172

\*p= 0.000 \*\*p= 0.001

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 161-171cm (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.

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