



An Analysis of the Demographic Profile of Hypertensive Patients at Ayodhya District Hospital, Uttar Pradesh

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Abstract:

Hypertension poses a significant risk to cardiovascular health and remains a formidable challenge for physicians worldwide. Research investigated the composition of participants in terms of age, gender, educational background, marital status, religion, and residential area, focusing on stage-1 hypertension. The study took place at a district hospital in Ayodhya, Uttar Pradesh, and involved 300 participants selected through simple random sampling, encompassing both males and females. The results emphasized a higher proportion of female participants, suggesting the importance of examining potential gender-related influences on the study outcomes. Regarding education, females showed higher percentages in the Secondary and Primary education categories compared to males. Marital status did not reveal significant gender differences, indicating minimal impact on the study results. Occupational patterns varied significantly, with males being more likely to work in government and private services, while females predominantly focused on household duties as homemakers. Additionally, the study revealed a majority of Hindu participants, with a smaller representation of Muslims. These findings emphasize the significance of considering demographic characteristics when interpreting the results and understanding potential influences on stage-1 hypertension outcomes. By acknowledging the diverse participant composition, healthcare professionals and policymakers can develop targeted interventions and strategies to address the specific needs of individuals with stage-1 hypertension across various demographic groups.

Keywords: Blood pressure, Demographic Profile, Heart disease and Stage-1 hypertension

INTRODUCTION

Hypertension, commonly known as high blood pressure, is a significant global health concern affecting millions of individuals worldwide. It is a chronic condition characterized by persistently elevated blood pressure levels, which can lead to severe complications such as heart disease, stroke, and kidney problems. Enhancing the management of blood pressure requires ensuring the provision of high-quality care to individuals with hypertension. The demographic factors under investigation include age, gender, socioeconomic status, educational background. Study investigated the following objective:

- To study the socio-economic profile of stage - 1 Hypertensive patients.

Methodology:

A study was carried out at a district hospital in Ayodhya, Uttar Pradesh, situated in the Civil Line Rikabganj. The study focused on both male and female participants. A sample study was directed among patients diagnosed with stage-1 hypertension who were attending the Cardiology Outpatient Department (OPD) of the district

hospital. A total of 300 samples were selected for both the study and control groups using the Simple Random Sampling technique.

Findings of the study:

Table – 1: Distribution of respondents on the basis of their age and gender

Age (Yrs.)	N	%
< 40	115	38.3
40-55	101	33.7
>55	84	28.0
Total	300	100.0
Average age of the respondents \pm SD = 47.19 \pm12.68, Range = (27-75)		
Gender		
Male	111	37.0
Female	189	63.0

In Case of the age distribution, a total of 300 respondents were included in the study. The participants were divided into three age categories: <40 years, 40-55 years, and >55 years.

The largest age group was <40 years, which comprised 115 participants, accounting for 38.3% of the total sample. The next age category, 40-55 years, included 101 participants, representing 33.7% of the sample. The smallest age group was >55 years, with 84 participants, making up 28.0% of the total sample. The average age of the respondents was calculated to be 47.19 years, with a standard deviation (SD) of 12.68. The age range of the participants varied from 27 to 75 years.

In terms of gender distribution, there were 111 male participants, accounting for 37.0% of the total sample. On the other hand, there were 189 female participants, representing 63.0% of the sample. Overall, the study included a diverse range of participants in terms of age and gender. The majority of the participants were females (63.0%), and the age distribution was relatively evenly spread across the three age categories. These findings provide a basis for analyzing the impact of age and gender on the study outcomes.

Table – 2: Distribution of respondents according to their educational status and gender.

Educational status	Gender					
	Male		Female		Total	
	N	%	N	%	N	%
Illiterate	10	9.0	44	23.3	54	18.0
Primary education	8	7.2	46	24.3	54	18.0
Secondary education	28	25.3	55	29.0	83	27.7
High school	10	9.0	20	10.6	30	10.0
Intermediate	22	19.8	9	4.8	31	10.3
Undergraduate	21	18.9	9	4.8	30	10.0
Post graduate	12	10.8	6	3.2	18	6.0
Total	111	100.0	189	100.0	300	100.0
$X^2 = 56.02, df = 6, P < 0.001$						

The study included a total of 300 participants, consisting of 111 males and 189 females. Among the male participants, the highest percentage (25.3%) had completed Secondary education, followed by Undergraduate (18.9%) and Intermediate (19.8%) levels of education. In contrast, the lowest percentage of males fell under the Postgraduate category (10.8%).

For the female participants, the highest percentage (29.0%) had completed Secondary education, followed by Primary education (24.3%) and Undergraduate (4.8%). The lowest percentage of females fell under the Postgraduate category (3.2%).

Comparing the educational status between genders, it is observed that a higher proportion of females completed Secondary education (29.0%) compared to males (25.3%). Similarly, more females had completed Primary education (24.3%) compared to males (7.2%). A chi-square test was conducted to examine the association between gender and educational status. The test result showed a highest significant association ($\chi^2 = 56.02$, $df = 6$, $P < 0.001$), between gender and educational status.

Table – 3: Distribution of respondents according to their marital status and gender

Marital status	Gender					
	Male		Female		Total	
	N	%	N	%	N	%
Married	85	76.6	151	79.9	236	78.7
Unmarried	-	-	-	-	-	-
Divorce/Separated	5	4.5	7	3.7	12	4.0
Widow/Widower	21	18.9	31	16.4	52	17.3
Total	111	100.0	189	100.0	300	100.0
$X^2 = 0.47$, $df = 2$, $P > 0.05$ (NS)						

Study comprised a total of 300 participants, consisting of 111 males and 189 females. Among the male participants, the majority (76.6%) were married, followed by Widow/Widower (18.9%) and Divorce/Separated (4.5%). No participants were categorized as unmarried. For the female participants, a similar trend was observed, with the highest percentage (79.9%) being married. The next highest percentage was Widow/Widower (16.4%), followed by Divorce/Separated (3.7%). Again, no participants were categorized as unmarried. Comparing the marital status between genders, it is evident that a higher percentage of females were married (79.9%) compared to males (76.6%). However, the difference is relatively small. The distribution of marital status did not differ significantly between males and females. These findings suggest that marital status may not a significant impact on the study outcomes in relation to gender.

Table – 4: Distribution of respondents on the basis of their occupational status and gender

Occupational Status	Gender					
	Male		Female		Total	
	N	%	N	%	N	%
Govt. Service	23	28.8	25	13.3	48	16.0
Private Service	29	26.1	1	0.5	30	10.0
Self Employed	15	13.5	1	0.5	16	5.3
Daily Wage	5	4.5	1	0.5	6	2.0
Agriculture	28	25.2	1	0.5	29	9.7
House makers	0	0.0	159	84.2	159	53.0
Retired	11	9.9	1	0.5	12	4.0
Total	111	100.0	189	100.0	300	100.0
$X^2 = 228.79$, $df = 6$, $P < 0.001$						

The study included a total of 300 participants, consisting of 111 males and 189 females. Among the male participants, the highest percentage (28.8%) was engaged in Govt. Service, followed by Private Service (26.1%) and Agriculture (25.2%). The lowest percentages of males were involved in Daily Wage (4.5%) and Retired (9.9%) occupations. Self Employed (13.5%) also had a moderate representation among male participants.

For the female participants, the majority (84.2%) were categorized as House makers, indicating that they primarily focused on household duties and responsibilities. A small percentage of females were engaged in Govt. Service (13.3%), while the rest had negligible representation in other occupational categories.

Comparing the occupational status between genders, it is observed that a higher percentage of males were involved in Govt. Service (28.8%) and Private Service (26.1%) compared to females (13.3% and 0.5%, respectively). Conversely, a significantly higher percentage of females were categorized as house makers (84.2%) compared to males (0.0%).

A chi-square test was conducted to examine the association between gender and occupational status. The test result showed a significant association ($\chi^2 = 228.79$, $df = 6$, $P < 0.001$) between gender and occupational status.

Table – 5: Distribution of respondents according to their religion and residential area

Religion	N	%
Hindu	249	83.0
Muslim	51	17.0
Total	300	100.0
Residential Area		
Rural	114	38.0
Urban	96	32.0
Semi-urban	90	30.0

Above table provided presents the distribution of participants based on religion and residential area.

Religion:

The study included a total of 300 participants, where the majority 249 (83.0%) identified themselves as Hindus. Of the remaining participants 51 (17.0%) belonged to the Muslim faith.

The high percentage of Hindu participants suggests that the study sample was predominantly composed of individuals following Hinduism. The smaller percentage of Muslim participants indicates a relatively smaller representation of individuals from the Muslim community in the study. Religious affiliation can play a role in various aspects of health, behavior, and cultural beliefs.

Residential Area:

The residential area of the participants was categorized into three groups: Rural, Urban, and Semi-urban.

Among the participants, the largest percentage 114 (38.0%) resided in rural areas, followed by those in urban areas 96 (32.0%) and semi-urban areas 90 (30.0%). These findings indicate a relatively balanced distribution of participants across different residential areas.

The residential area can impact several aspects of health and lifestyle, including access to healthcare, environmental factors, and social dynamics.

Conclusion:

A study demonstrated a diverse participant composition with regards to age and gender. The majority of participants were females, suggesting the need to explore potential gender-related influences on the study outcomes. Furthermore, the study uncovered notable variations in educational status between genders, with females exhibiting higher percentages in Secondary and Primary education categories compared to males. This underscores the significance of considering educational backgrounds when interpreting the study findings and their implications. Regarding marital status, the study revealed that the majority of participants from both genders were married. However, the distribution of marital status did not significantly differ between males and females. These findings suggest that marital status may have minimal impact on the study outcomes in relation to gender. Moreover, the study highlighted distinct occupational patterns between genders, with males being

more likely to be engaged in government and private services, while females predominantly focused on household duties as house makers. These findings shed light on the influence of societal norms and gender roles in occupational choices, and underscore the importance of considering occupational status as a demographic characteristic that may influence the study outcomes. The study observed a majority of Hindu participants, with Muslims representing a smaller proportion.

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