



Gender Difference in Hypertensive Patients on Sixteen Personality Factors

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Abstract

Gender difference in personality is interest of research for many years. There are many personalities which were said to be associated to hypertension disease. Aim: the present study aimed at assessing gender difference in hypertensive patients. Methodology: 16 PF questionnaires were administered on 30 male and 30 female from different profession having hypertensive. Results: there was significant difference between male and female patients on personality factors C, I, O, and Q1. Conclusion: It indicates that hypertensive female are emotionally less stable, suspicious, guilt proneness, critical, analytical, and free thinking. On factor I, male scored significantly higher than female patients. Male patients are tender minded, overprotected, and sensitive in nature.

Keywords: personality factors, hypertensive disease, gender difference.

INTRODUCTION

Most of the studies show that hypertension is increase with age. Irregular blood pressure is the important cause of cardiovascular diseases, for example heart attacks, stroke etc. About 220 million people are suffering from hypertension in India.

Hypertension refers high blood pressure which is constantly upper than 140 over 90 millimeters of mercury (mm Hg). Hypertensive person may not feel any symptoms. Hypertension may harm the heart, blood vessels and other organs of the body.

High blood pressure can cause:

- Sweating
- Anxiety
- Sleeping problems
- Blushing

Complications-

Long-term hypertension can cause

- Heart failure and heart attacks
- Kidney failure
- Stroke
- Amputation
- Hypertensive retinopathies in the eye, which can lead to blindness

Factors enhancing hypertension-

- having obesity
- insulin resistance
- high salt intake
- excessive alcohol intake
- having a sedentary lifestyle
- smoking

Hypertension may appear in below conditions-

- diabetes, due to it causing kidney problems and nerve damage
- pheochromocytoma — a rare cancer of an adrenal gland
- Cushing's syndrome

- congenital adrenal hyperplasia — a disorder of the cortisol-secreting adrenal glands
- hyperthyroidism, or an overactive thyroid gland
- pregnancy
- sleep apnea

Risk factors

- **Age:** Hypertension is very frequent in the people who are above 65 years old.
- **Ethnicity:** African, Americans are more suffered with hypertension than other racial groups.
- **Weight:** Obesity is the major cause of hypertension.
- **Alcohol and tobacco use:** Frequently taking heavy alcohol or tobacco increase the level of blood pressure.
- **Sex:** Males are more suffer with hypertension than females.

Treatment of hypertension-

- Regular physical exercise such as walking, jogging, cycling, swimming
- Stress reduction techniques like [meditation](#) warm baths [yoga](#) going on long walks.
- Avoid consuming alcohol and recreational drugs
- Avoid smoking
- Medication
- Reducing salt intake
- Eating fruits and vegetables
- Manage body weight

Hypertension and Gender difference on personality factors

Hypertension is a multi-factorial consequence of environmental factors and life style. Personality factors play a vital role to determine the lifestyle of a person. The personality traits of females are different than males. Female are more sensitive than males. Females have to face lots of difficulties in their lives. It depends on the nature of their personalities that how they tackle these problems. In this study 16 PF questionnaire was used to know that personality factors of hypertensive male and female respondents. The details of personality factors are given below-

- Warmth (A), reserved/warm
- Reasoning (B), concrete thinking/abstract thinking
- Emotional stability (C), reactive/emotionally stable
- Dominance (E), submissive/dominant
- Liveliness (F), serious/lively
- Rule consciousness (G), expedient/rule conscious
- Social boldness (H), shy/bold
- Sensitivity (I), unsentimental/sensitive
- Vigilance (L), trusting/vigilant
- Abstractedness (M), practical/abstracted
- Privatness (N), forthright/shrewd
- Apprehension (O), self-assured/apprehensive
- Openness to change (Q1), traditional (conservative)/open-to-change
- Self-reliance (Q2), group-dependent/self-reliant
- Perfectionism (Q3), tolerates disorder/perfectionistic
- Tension (Q4), relaxed/tense

Baer, Paul et al. (1979) found that age, sex, socioeconomic status, hypochondriasis, social desirability were not associated with hypertension. Hypertensive person have anger arousal, resentment, anxiety, and attention seeking personality traits. Hypertensives reported higher levels of hostility and anxiety than normotensives.

Irvine, Garner et al. (1989) coded that personality factors are not a fundamental characteristic of hypertension but reflect the influence of exposure to medical attention or knowledge of hypertension status.

Terracciano, Antonio et al. (2014) found blood pressure is connected to antagonism and impulsivity-related traits. They also found that conscientiousness trait have a broad impact on cardiovascular health.

Friedman, Richard et al. (2001) found no consistent difference between participants with mild hypertension and those with normal blood pressure on any of the psychological variables assessed, including Type A behavior pattern, state and trait anger, anger expression, anxiety, symptoms of psychological distress, locus of control, or attributional style.

Karin, Helmers et al. (2001) found no significant association between gender and anger-out.

Kidson (1973) found that hypertensive outpatients were significantly more neurotic than nonpatients.

Aim

The present study aimed at examining gender difference in personality's factors of hypertensive patients.

METHODOLOGY

Sample

Sample of the study consists of thirty (30) male and thirty (30) female hypertensive patients who are doctors, professor, and government officer by profession of different districts like Ranchi, and Jamshedpur of Jharkhand state. Quota sampling technique was used for selection of sample. Subjects were selected from age range of 35 to 50 years.

Tools

Personal Data Sheet:

To collect information regarding socio-demographic characteristics and other related information of the sample a personal data sheet was prepared for the present study.

16-PF Questionnaire

The 16 personality factors questionnaire has been developed by Cattell (1946), adopted in Hindi by S. D. Kapoor (1970). This questionnaire contains 16 bipolar personality scales. A separate answer sheet is provided. Each question has three alternative answer and the subject is to select the one appropriate for him and then to mark a tick (/) in the answer sheet in appropriate place. With the help of the scoring stencil the raw score for each factor is obtained which is later converted into standard score which are called 'Stens score' with the help of relevant tables given in the manual. The stens scores range are distributed over 10 equal interval standard score points, assuming normal distribution from 1 to 10. The one would consider stens of 5 or 6 as average, 4 or 7 slightly deviant (respective in a low and high direction) 2, 3, 8, and 9 strongly deviant, and 1 or 10 extreme on either sides, all these being placement of the person relative to the define population on which the standardizations are based. This questionnaire is popularly used in research clinical practices. The authors of 16 PF report that the correlation of the scale scores with the factors they are designed to measure approximately 0.65, test- retest reliable. 16-PF forms A-E effectively measure levels of warmth, intelligence, educational maturity, dominance, impulsivity, superego strength, boldness, sensitivity, trust, imagination, shrewdness, confidence, radicalism, self-sentiment and tension. Additional derived scale includes five second order factors; extraversion, anxiety, tough-poise, independence and social control, plus-composite, scores for creativity, adjustment, leadership and numerous other criterion related scales.

Procedure

First of all sample consisting of 30 male and 30 female hypertensive patients were selected from various hospital, private clinic, colleges and government office by using quota sampling technique. Socio demographic information was collected using the Personal Data Sheet. Then 16 PF was administered on all participants individually.

Statistical analysis

Data obtained was analyzed with respect to the objectives of the study.

Table 1.0: mean profile of hypertensive male and female subjects on sixteen factors of personality

16 P F	Male (N=30)		Female (N=30)		t
	Mean	S D	Mean	S D	
A	5.00	1.33	5.03	1.03	0.10 ^{NS}
B	5.30	1.78	5.73	1.11	1.12 ^{NS}
C	4.40	1.32	3.13	1.38	3.61 ^{**}
E	5.10	1.44	4.73	1.01	1.13 ^{NS}
F	3.70	1.39	3.16	1.08	1.65 ^{NS}
G	6.23	1.50	5.53	1.25	1.96 ^{NS}
H	6.40	1.32	6.20	1.58	0.53 ^{NS}
I	6.56	1.79	5.23	1.75	2.90 ^{**}
L	5.40	2.11	7.00	1.31	3.52 ^{**}
M	4.16	1.34	4.03	1.42	0.37 ^{NS}
N	5.16	1.64	4.40	1.40	1.94 ^{NS}
O	5.16	1.85	6.16	1.34	2.39 [*]
Q1	4.96	1.06	5.70	1.02	2.71 ^{**}
Q2	5.23	1.22	5.16	1.36	0.19 ^{NS}
Q3	5.53	1.43	5.16	0.91	1.18 ^{NS}
Q4	5.90	1.58	6.06	1.01	0.48 ^{NS}

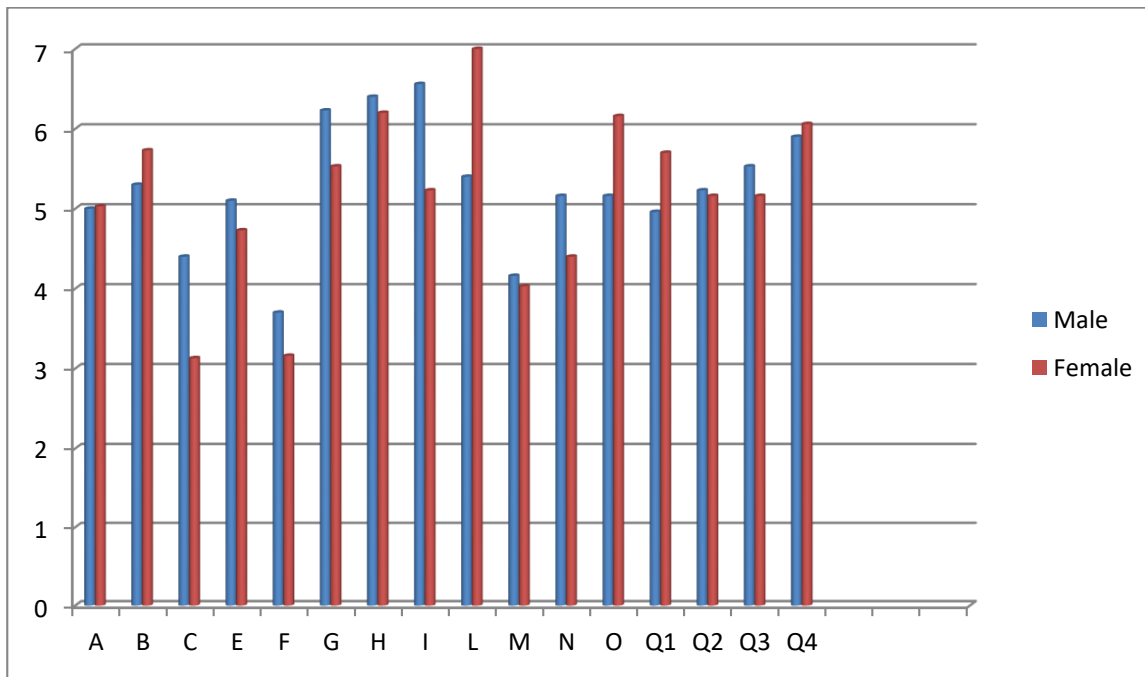


Figure 1.0 A graphic presentation of the mean profile of male and female in hypertensive group subjects on various factors of 16 PF questionnaires.

- From the above table it appears that the male ($M=4.40, 6.56, 5.40, 5.16$ and 4.96) and female ($M=3.13, 5.23, 7.00, 6.16$ and 5.70) subjects were significantly differentiated on factors C, I, L, O, and Q1 ($t=3.61, 2.90, 3.52; P<0.01, 2.39; P<0.05, 2.71 P<0.01$). On factor C female scored lowest and factors L, O and Q1 scored significantly high. It indicates that cardiac female are emotionally less stable, suspicious, guilt proneness, critical, analytical, and free thinking. On factor I male scored significantly higher than female patients. Showing difference that male patients are tender minded, overprotected, and sensitive in nature.

Significant difference not found between hypertensive males and females on factor A, B, E, F, G, H, M, N, Q2, Q3 and Q4. It means male and female are similar on these factors.

Conclusion- The present study indicates that hypertensive female are emotionally less stable, suspicious, guilt proneness, critical, analytical, and free thinking. On factor I, male scored significantly higher than female patients. Male patients are tender minded, overprotected and sensitive in nature.

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