

**PERSONALITY AND STRESS AMONG HYPERTENSIVE PERSONS IN THE  
REGION OF PRIZREN**

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**ABSTRACT**

Hypertension commonly known as high blood pressure (BP) is a psycho physiological disorder and the main problem linked with it is its risk potential. The purpose of the present study is to describe personality type and to explain levels of stress in a sample of persons with high blood pressure in Prizren region. Data collection was done during the routine visits of the patients identified with hypertension at the family medicine centre where I work as resident physician in family medicine also at private ambulance in Zhur "NDERIMED". Participants were 233 patients diagnosed with hypertension in the region of Prizren, Kosovo. In terms of gender composition there were 109 (47%) men and 124 (53%) women; Age group most affected was over 65 years (45.5%) than age group 55-64 years (30.9%). According to Glazer scale which determines the type of personality, type A were 147 (67.1%), type B 43 (19.6%) and type AB 29 (13.3%). No significant gender differences were found in the levels of reported stress; it seems that although men and women might experience different types of stressors, the overall levels experienced by both are similar. Also no significant relationships were found between stress and age, despite the wide age range of almost 30 years (45 to 74 years old). Variations in marital status also did not contribute to explain stress levels. Nonetheless these results might have a statistical explanation, since they might be due to the absence of variation of the sample; in fact most of the participants were married (77.7%), unmarried was one (0.4%), 1.7% were divorced and 20.2% widowed. Finally the only hypothesis confirmed was that of the relationship between personality types and stress.

**Keywords:** Personality, stress, hypertension, Prizren region.

**INTRODUCTION**

Hypertension commonly known as high blood pressure (BP) is a psycho physiological disorder and the main problem linked with it is its risk potential. Since in most cases no symptoms are noticeable over long periods, the disease often is well established before treatment is initiated. It therefore, is also known as the silent killer as people may go on for years without knowing its presence organically; the elevation in BP is caused by a constriction of blood vessels and malfunction of a set of nerves called baroreceptors which ordinarily depress BP when a critical level is reached. [4, 8]

Personality traits appear to play an influential role in the development of psychological distress. Personalities that are more negative are traditionally associated with greater distress, while more outgoing and positive personalities generally experience positive psychological health [16, 17, 18, 19]. Cloninger's model postulates that personality development is influenced by both biological and psychological processes. Strong associations have been found between Cloninger's personality traits and psychological distress which suggests that certain personalities may be genetically predisposed to experience distress. In addition, neurotic persons reported experiencing more stressful events.

Type A behavior pattern individuals generally respond to stressful situations with marked increase in heart rate and blood pressure [20]. The best prediction of heart disease can possibly be obtained by measuring hostility, anger, anxiety the most important feature of type A behavior pattern. Stress is considered as one the main factors influencing hypertension. In turn stress itself is explicable in terms of several factors including demographic characteristics (age, gender), marital status, level of education, and personality characteristics.[1] Hence, research has found gender differences in types and levels of stress, apparently related to gender role perceptions and schemata.[2] Also level of education has been involved in explaining differential stress rates, although there are contradictory findings on the effect of higher vs. lower educational level.[3] As regards personality characteristics, research has found relationships between personality type and stress levels in several patient studies; Indeed personality characteristics such as the constant experience of negative affect (anxiety, irritability etc.) are related to both higher levels of stress and negative patient outcomes (e.g., hypertension patients).[4]

Marital status has also been considered as another important variable; indeed the social support provided by partners, which also extends into practical terms (e.g., taking pills regularly) is related to decreased stress and higher quality of life among patients.[5] The reactivity hypothesis considers that exaggerated cardiovascular reactions to acute psychological stress play a role in the development of hypertension and other markers of cardiovascular disease [7]. Supporting evidence comes from large scale observational studies that find positive associations between the magnitude of cardiovascular reactions to acute psychological stress and future blood pressure status [1, 6, 8]. Since we live in a competitive society filled with stresses, there is a heightened interest in the relationship between health and stress, especially as regards patient populations which seem to be strongly affected. [11] Purpose of the study: The purpose of the present study is to describe personality type and to explain levels of stress in a sample of persons with high blood pressure in Prizren region.

## METHODOLOGY

Participants were 233 patients diagnosed with hypertension in the region of Prizren, Kosovo. In terms of gender composition there were 109 (47%) men and 124 (53%) women; Age group most affected was over 65 years (45.5%) than age group 55-64 years (30.9%). The most of participants 158 (67.8%) were with completed elementary education. Also as regards marital status, 181 (77.7%) of participants were married, while 1 (0.4%) was unmarried, 4 (1.7%) were divorced and 47 (20.2%) were widowed. Data collection was done during the routine visits of the patients identified with hypertension at the family medicine centre where I work as resident physician in family medicine also at private ambulance in Zhur "NDERIMED". All data was collected by the researcher. Data collection was done through the Life Style Questionnaire and Perceived Stress Scale (modified Life Style Questionnaire from Institut de recherches cliniques de Montreal, 2008). The questionnaire had 73 items in total. For the purpose of the present study only items providing information on age, gender, education, stress, and personality type were used. Stress was measured with 3 groups of 30 questions scalable with 10 choices. Higher scores suggested higher levels of stress. Personality type was measured with 2 items; Determination of personality type A or B was made when assessing the responses in 10 opportunities scalable, near 0 were type B and closer to 10 were type A. Questions were related to communication, feeling express, doing job etc.

Statistical analysis was realized with Statistical Package for Social Sciences SPSS 21.0. Discrete data was shown in absolute value and percentage. Differences between variables were analyzed by Chi-Square test. Relationships between variables were assessed with correlation analysis. The level of significance was set at  $p \leq .05$ . Ethical considerations - Initially was received written consent from the directorate of the center where the interview will be realized, in this case the Main Family Medicine Center in Prizren and private ambulance "Nderimed" Zhur. Also from all participants was received oral consent for the opportunity to participate in research and then provided clarification regarding the procedure. The interview was conducted on condition of anonymity because it was not required that they to be identified in any way and they were casual participants.

## RESULTS

Regarding to gender representation 109 (47%) were male and 124 (53%) women. Most of the participants 158 (67.8%) were with primary school. The most affected age group was that over 65 years (45.5%) then the age group 55-64 years (30.9%). Regarding marital status, 181 (77.7%) of the participants were married, while 1 (0.4%) was unmarried, 4 (1.7%) were divorced, and 47 (20.2%) were widowed.

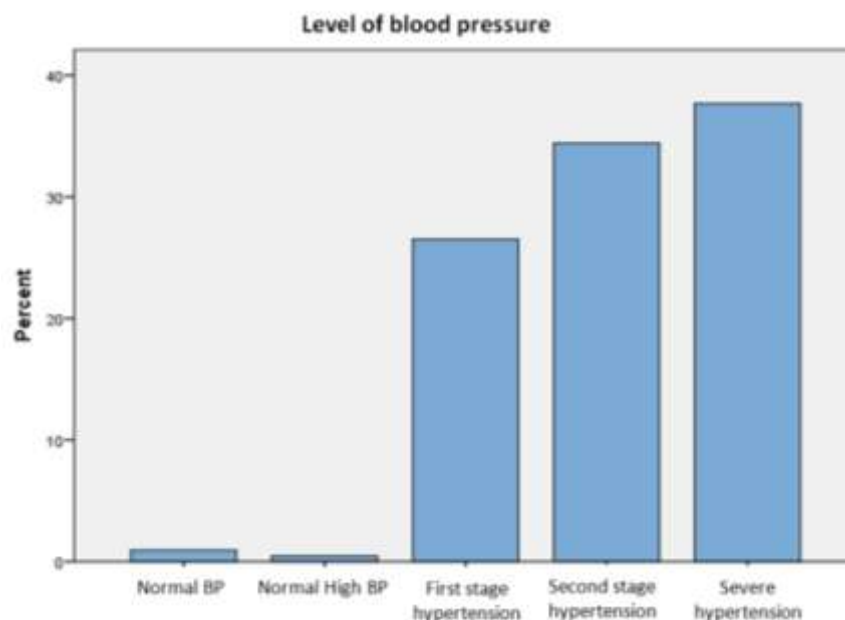


Figure 1. Level of blood pressure

From a total of 233 participants in the study 18 (7.7%) didn't answer and also aren't included in the analysis. 3 (1.4%) had normalized blood pressure, 26.5% had first stage hypertension, 34.4% of participants had second stage hypertension and 37.7% had severe hypertension.

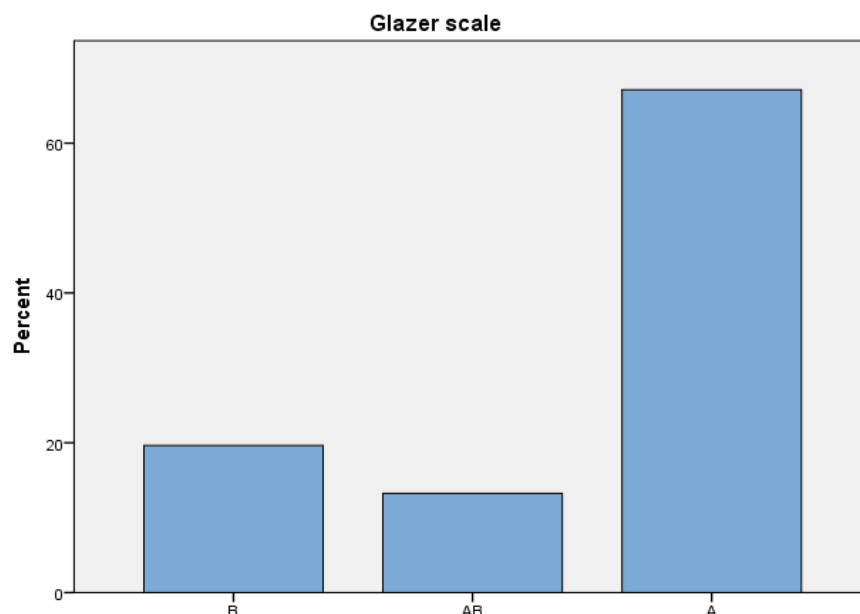
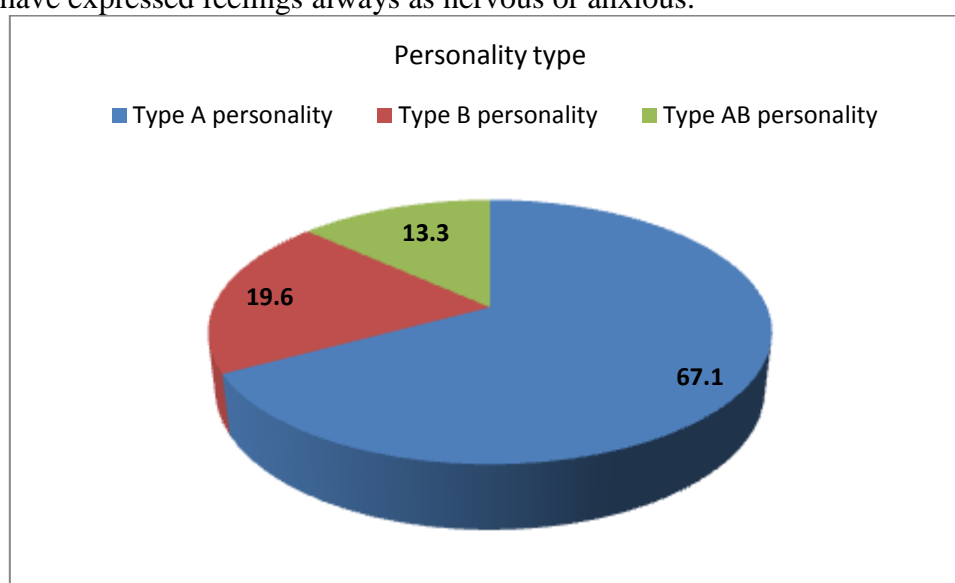


Figure 2. Presentation of the personality by Glazer scale

According to Glazer scale which determines the type of personality in Figure 2 shows that people of type A were 147 (67.1%), type B 43 (19.6%) and type AB 29 (13.3%).

Related to stress, results showed no significant gender differences in stress levels, so that men and women reported similar levels of stress. Also no significant relationships were found between stress and age. Variations in marital status also did not contribute to explaining stress levels, a finding which might be due to the absence of variation (most of participants were married). Similarly levels of education were also unrelated to the levels of stress reported also due to the small variation in this variable (e.g., very few of them had high level of education). The only variable significantly related to stress levels was personality type,  $r=.32$ ,  $p<05$ . So Type A personality reported significantly higher levels of stress as compared to type B personality; more specifically in terms of gender composition, the majority of the sample was Type A (only 14% of females and 15% of males are type B). Most of participants (53.6%) have expressed feelings always as nervous or anxious.



Graph 1. Personality type

## DISCUSSION

Type A personality reported significantly higher levels of stress as compared to type B personality; in this study according to Glazer scale, type A were 147 (67.1%), type B 43 (19.6%) and type AB 29 (13.3%), more specifically in terms of gender composition, the majority of the sample was Type A (only 14% of females and 15% of males are type B). This result is in accordance with Evans statement "Type A behavior pattern individuals generally respond to stressful situations with marked increase in heart rate and blood pressure. The only hypothesis confirmed was that of the relationship between personality types and stress; the present findings are in line with existing literature on the relationship between Type A personality and stress levels.

Related to stress, results showed no significant gender differences in stress levels, so that men and women reported similar levels of stress. Also no significant relationships were found between stress and age. Variations in marital status also did not contribute to explaining stress levels, a finding which might be due to the absence of variation (most of participants were married in this study). These data found in the research are inconsistent with the data from the literature, according to Carroll (2003) and Nichole (2012) stress itself is explicable in terms of several factors including demographic characteristics (age, gender), marital status, level of education, and personality characteristics. Similarly levels of education were also unrelated to the levels of stress reported also due to the small variation in this variable (e.g., very few of them had high level of education). Also those data are inconsistent with literature review, according to Carroll (2003) level of education has been involved in explaining differential stress rates, although there are contradictory findings on the effect of higher vs. lower educational level.

## CONCLUSIONS

The findings in this study are quite stressful in terms of health behaviors displayed by patients with hypertension. No significant gender differences were found in the levels of reported stress; it seems that although men and women might experience different types of stressors, the overall levels experienced by both are similar. Also no significant relationships were found between stress and age, despite the wide age range of almost 30 years (45 to 74 years old). Variations in marital status also did not contribute to explain stress levels, a finding which is not in line with research suggesting an important buffering role of partners against stress. Nonetheless these results might have a statistical explanation, since they might be due to the absence of variation of the sample; in fact most of the participants were married (77.7%), unmarried was one (0.4%), 1.7% were divorced and 20.2% widowed. Finally the only hypothesis confirmed was that of the relationship between personality types and stress; the present findings are in line with existing literature on the relationship between Type A personality and stress levels. Moreover the great majority of the sample seems to be Type A personality, a finding which clearly needs to be seriously considered. Indeed these results suggest the need to address the particular personality characteristics of patients in the effort to reduce stress and control hypertension.

Based on the results of the research, discussions and numerous comments that was said during the interviews conducted I recommend that: health care providers in every meeting with people who have a risk of hypertension or those who suffer from this disease, education on self-care and lifestyle change becomes necessary method to effectively prevent the worsening of the disease.

The implications are clear for health professionals who deal with these patients, especially in providing advice and life style and social support. In this context, future research may suggest to investigate the real reasons for this finding, especially in terms of the roles that health professionals have in this process. To conclude, despite the limitations (small sample, descriptive data, etc.) study provides some important guidance for future research.

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