

Incidence of “Stress Syndrome” or Type A Personality in Medical Students

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ABSTRACT

Objective: 1. To assess the frequency of type A personality in medical students
2. To compare different personality types of medical students from 1st to final year.

Study Design: A cross sectional study.

Place and Duration of Study: This study was conducted at the Department of Community Medicine, SMC, DUHS, Karachi from 15th, May to 25th, November 2010.

Materials and Methods: A sample size of 140 students was drawn by using systemic random sampling; every 22nd student from each year was selected according to the roll numbers from first year to final year in Sindh, Dow Medical College and Karachi. Data was collected through a structured questionnaire.

Three personalities (Type A, Type AB, Type B)

Personality Types	Scores
• Type B	0 – 35
• Type AB	36 – 45
• Type A	46 – 80

Results: Out of 140 students, 42 were males, 69 were females. The results showed Type A personality was 82.9%, Type AB 16.4%, TYPE B was 0.7%. Students having type A personality in first year were 92.85%, in second year 100%, in third year 46.4%, in fourth year 85.7%, in final year 89.2%. Type A personality in males were found to be 92.30% as compared to females 83.67%. Students who took their task very seriously 45%, easily got Irritated 51.4%, Restless during studies 32.1%, dissatisfied with task performed 49.3%, Work conscious 43.6%. On the basis of these results majority of the medical students fall in the category of type A personality, surprisingly 100% students of 2nd year fall in type A category.

Conclusion: The study proved major population of medical students had Type A personality which showed they were tensed, impatience, aggressiveness, time conscious, concerned about their studies, highly competitive, ambitious, vulnerable to stress related diseases.

Key Words: Type A personality, Personality, Stress, Behavior Pattern, Medical students.

INTRODUCTION

Every person in this world has their unique personality which they adopt during the course of life and merge it with their natural instincts and ways so that they complement each other. That is how every person is just suited to the life he/she leads as his/her personality gets perfectly molded in it to work best for him/her in this world that strictly follows the rule of 'survival of the fittest'. 'Impatient', 'time conscious', 'workaholics' and not to forget, 'the nerds' were the immediate responses of the general public when we asked them to consider the word 'medical student'. The Type A personality has been defined by Meyer Friedman and Ray Rosen man as "a behavior pattern associated with individuals who are highly competitive and work compulsively to meet deadlines".⁽¹⁾ Their lives are governed by unrealistic ambition that constantly keeps them on the go as they tend to be impatient and the

sense of urgency incorporates aggressiveness in their character.⁽²⁾ On the other side of the personality spectrum, is Type B personality, which in striking contrasts with the type A is displayed by individuals who are calm, easy going relaxed and satisfied. Some people share the mixed characteristics of both personality types and cannot be clearly classified into any one are included in type AB personality. 'Stress syndrome' 90% students fell under type A personality. The stress levels progressively increased during the clinical years.⁽³⁾

MATERIALS AND METHODS

A cross-sectional study was done on students of Sindh, Dow Medical Colleges. Sample size of 140 was drawn using systematic random sampling method. 28 students were selected from each class from 1st year to final year M.B.B.S. Every 22nd student was selected from roll number list from each class. Structured

questionnaire was distributed among the students with their consent.

Three personalities (Type A, Type AB and Type B) were divided by scoring method out of 80 with following limits:

Type of Personality	Scoring Limits
Type A	46-80
Type AB	35-45
Type B	0-34
Total Scoring	80

Data Analysis: The significance of the data was determined by using Statistical Package of Social Sciences software (SPSS, Version 16.0). Confidence interval of 95% was taken with margin of error 5% and p-value of 0.05. The study was completed in six months from 15th, May, 2010 to 25th, November, 2010. The required permission was obtained from the administrators of various departments prior to study. Data was collected, analyzed on Statistical Package of Social Sciences (SPSS) of version 17.0.

RESULTS

The study assessed Type A personality in medical students of Dow and Sindh Medical College from 1st year to Final year. 28 students were selected from each year. Sample size of 140 was drawn through systematic random sampling; every 22nd student from each class was selected. Out of 140, 42 males were and 98 females. Overall results showed Type A personality to be 82.9%, Type AB personality 16.4% and Type B personality 0.7%. This proved majority of the students belonged to Type A personality. Students with type A personality in first year were 92.85%, second year 100%, third year 46.4%, fourth year 85.7%, final year 89.2%.

Table No.1: Frequencies of Personality Type in Medical Students

Personality type	Frequency	Percent
Type A	116	82.9
Type AB	23	16.4
Type B	1	0.7
Total	140	100.0

Table No.2: Frequencies of positive and negative result for Personality Type in medical students

Questions asked	A % Agreed	B %Disagreed
Task seriously	45%	4.3%
Easily Irritated	51.4%	10.7%
Restless	32.1%	15.7%
Dissatisfaction	49.3%	11.4%
Work conscious	43.6%	3.6%

Students who took their task very seriously 45%, easily got Irritated 51.4%, Restless during studies 32.1%, dissatisfied with task performed 49.3%, Work conscious 43.6%. On the basis of these results majority

of the medical students fall in the category of type A personality, surprisingly 100% students of 2nd year fall in type A category.

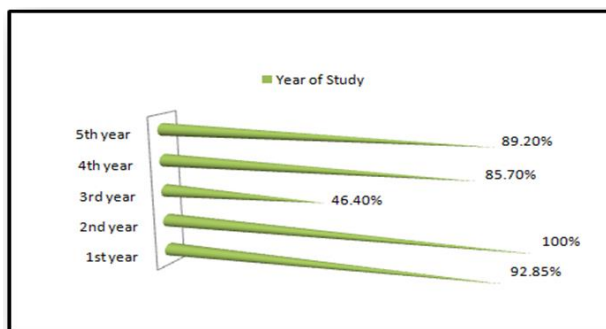


Figure 1: Comparison of Type A personality of 1st to 5th Year Medical Students.

DISCUSSION

Prevalence of Type A behavior was found to be significantly high among the students of first year and second year. Surprisingly, drop in Type A personality with concomitant rise in AB was observed in the initial clinical year, i.e. third year. The stress levels went on a high again with increase in Type A as the clinical exposure takes the front seat in fourth year, final year. The appealing traits of being competitive, task oriented and time conscious have always been a source of pride for the medical students. The present literature review revealed high prevalence of type A personality among medical students correlating with stress levels. The factors leading to stress are many, academic being the most important. (4) Friedmann studied this relationship. The results proved that the psychosocial factors of type A behavior did proceed onto the development of cardiovascular complications later in life. (2) As conducted by Contrada the undergraduate students examined for the systolic and diastolic blood pressures and the hardness was analyzed as the indicator of the strength of the heart, the differences were modest but reliable. (5) In Wolf study Type A personality decreased in initial years. Type A scores showed a significant increase over the first 3 years of the course, followed by a drop to approximately second-year levels by the end of the 5-year period. (3) Study by Zeppa compared the performances of students under stress after clinical clerkships. The unfavorable stress leads the students to external control and low self-esteem, along with poor performance (6) Study by Lebanon analyzed the relationship between the personality and performance on written and clinical skills. Type A students performed well on written examinations, although no difference noted on the clinical grounds. (7) Type A personality is also a known risk factor for cardiovascular diseases, (8) Another study by Firth on fourth year students revealed the levels of stress comparatively higher than general population. (9) Such

individuals are driven by the excessive drive of competition and the need for control.⁽¹⁰⁾

CONCLUSION

Type A and Type B personality type theory describes a behavior pattern characterized by tenseness, impatience, aggressiveness, often resulting in stress-related symptoms such as insomnia, indigestion, increasing the risk of heart disease. The study proved major population of medical students had Type A personality which showed they were tensed, impatience, aggressiveness, time conscious, concerned about their status, highly competitive, ambitious, vulnerable to stress related diseases. Teachers and Parents both should make the students comfortable, talk to them more often, try to solve their problems, reassure them frequently, keep a hawk eye for change in behavior.

REFERENCES

1. Mosby. Mosby's Dictionary of Medicine Nursing & Health Professions. 8th ed. St. Louis: MO Mosby/Elsevier;2009.
2. Friedman M. Type A Behavior: Its Diagnosis and Treatment. New York:Plenum Press (Kluwer Academic Press);1996. p.31.
3. Wolf TM, Kissling GE, Burgess LA. Change in type A behavior among medical students: a 4-year longitudinal study. Med Educ 1986;20(3):176-80.
4. Supe AN. A study of stress in medical students at Seth G.S. Medical College. J Postgrad Med 1988;44(1):1-6.
5. Contrada RJ. Type A behavior, personality hardiness, and cardiovascular responses to stress. J Pers Soc Psychol 1989;57(5):895-903.
6. Linn BS, Zeppa R. Stress in junior medical students: relationship to personality and performance. J Med Educ 1984;59(1):7-12.
7. Jones KV, Lebnan V. A 6-year follow-up of the type A behavior pattern in medical student. Med Educ 1988;22(3):211-3.
8. Krantz DS, Manuck SB. Acute psychophysiologic reactivity and risk of cardiovascular disease: a review and methodology critique. Psychol Bull 1984;96(3):435-64.
9. Firth J. Levels and sources of stress in medical students. Br Med J (Clin Res Ed) 1986;292(6529): 1177-80.
10. Rosenman RH, Friedman M, Straus R, Jenkins CD, Zyzanski SJ, Wurm M. Coronary heart disease in the Western Collaborative Group Study. A follow-up experience of 4 and one-half years. J Chronic Dis 1970;23(3):173-90.

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