

Trends of Narcissism among Medical and Non-medical Undergraduate Students of Lahore

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Abstract

Background: Narcissism is a personality disorder that has an impact on interpersonal relationship with friends, family and colleagues. These individuals can be more shy, arrogant or over-sensitive. These traits are also present among normal individual. A lot of features of behaviour are still unknown.

Objective: To observe the narcissism score among medical and allied health students and the association of narcissism with their academic performance.

Study type, settings & duration: This cross-sectional study was conducted at Fatima Memorial College of Medicine & Dentistry, Lahore from March 2019 to October 2019.

Methodology: In this cross-sectional study of six months duration the “Narcissistic Personality Inventory (NPI-40)” tool was administrated to 385 medical and allied health undergraduates. NPI scores were calculated. Comparative analysis was carried out. Multiple linear regression was also performed to observe the dependence of NPI score on demographic variables.

Results: NPI score of males were found to be higher (18.27) than females scores (14.66). The odds for NPI were 21.98 times higher in males as compared to females. Similarly, hostilities were 3.42 times at more risk of narcissism. Last exam percentage was significantly associated with narcissism score. (0.024)

Conclusion: Students of Allied health sciences exhibit more narcissistic traits than MBBS undergraduates. Institutes should encourage student counseling & mentoring sessions and they should have taught to overcome negative personality characteristics.

Key words: Narcissism, medical & allied students, Lahore, NPI, personality disorder.

Introduction

Narcissism is said to be increasing and it has had major impact on interpersonal relationships including the association and communication amongst family members, with peers and colleagues in schools and offices respectively. It has even affected the world

economy by the non-realistic, impractical and dangerous levels of confidence in such people.¹

Narcissism is basically defined as ‘the essential features of narcissistic personality disorder are a pervasive pattern of grandiosity, need for admiration and lack of empathy that begins by early adulthood and is present in a variety of contexts.’ Its prevalence in community samples ranges from 0 to 6.2% with 50 to 75% of those who are diagnosed being males.²

Symptoms of narcissism range from having a sense of entitlement and requiring constant, excessive admiration, preoccupation with fantasies and monopolizing conversations to belittle others and behaving in an arrogant manner.³ They are also more audacious and outgoing.⁴ And its origin is rooted not only in the late childhood when excessive appreciation by the parents serves as a factor for its development but is also inherited moderately.⁵ Other than this overt form of narcissism another covert form also exists known as the vulnerable

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Authors Contribution

ATZ & AR conceptualized the project. MAR, RSA, SA, MTZ & NA did the data collection. AK & MAA did the literature search. ZA & MA performed Statistical analysis. Drafting, revision & writing of manuscript were done by SH & ATZ.

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narcissism.⁶ These individuals are more shy, over sensitive and have an introvert personality.⁴

These traits are also present in the general population amongst normal individuals at the subclinical levels with these individuals having features of increased self-importance and self-worth.⁷ A lot of things are still unknown about the routine behavior of narcissist individuals. But they have been seen to act in more unacceptable ways as compared to normal individuals with a more common use of offensive language.⁸ Narcissist personality traits adversely affect the association and bonding between family members.⁹

In general, narcissism is on the rise in students.¹⁰ With the postgraduate students having a higher prevalence,⁷ studies suggest that academic failure is linked to college students having narcissistic traits¹¹ and over the years, narcissistic students become unhappy and disengaged from their studies.¹² In undergraduates, positive relationships were found between overt narcissism and general competitiveness and hyper competitiveness.¹³ These students are also more likely to bunk classes.⁸ It is also said to exist in medical professionals¹⁴ and according to a study held in Pakistan it has a high prevalence amongst medical students in 1st and 2nd year.¹⁵

It is important to conduct this study to assess the levels of narcissism amongst the medical students and to assess whether it increases over the academic years because not only as a student but also in future as a doctor their profession demands them to appropriately interact with their patient and colleagues. Inability to do so can have serious consequences. Similarly, students from allied health sciences also deals with patients in different manners. It is also important to see its relationship with their academic performance as narcissism can make a person more competitive and might help in achieving more. The objective of this study is to measure the Subclinical Narcissistic score of medical & allied college graduates and to test the relationship between Subclinical Narcissistic Score and Academic Performance over the years (both past and present academic performance). As we are determining the prevalence of narcissism among the undergraduate students, so it will definitely help to rule out behavioral issues among these students and early identification can prevent from any mental health problems.

Methodology

This cross-sectional study was conducted at Fatima Memorial College of Medicine & Dentistry,

Lahore from March 2019 to October 2019. Participants were informed beforehand that there is no risk involved in the study and participation is voluntary.

As our study population were undergraduate students, so we identify two strata's of MBBS and allied based on specific characteristics e.g. age, gender, location, etc. and each stratum is then sampled using another probability sampling method, such as simple random sampling for each sub-population.

The students of both groups were approached in college time and every student who was selected through simple random sampling was asked to fill the questionnaire. Those who were not willing were dropped out and next randomly selected student filled that gap to fulfill the criteria of required number of sample size. But the dropped out were less than 1% of the total sample size. Total 385 students were enrolled with a breakup of 250 MBBS students and 135 students from allied health sciences. Breakup of 250 enrolled MBBS students from 1st year to final year was 35,59,58,48 and 50 students respectively. Further among category of Allied Health Sciences breakup of enrolled students from 1st year to 4th year was 25, 38, 31 and 41 respectively.

Year	1 st	2 nd	3 rd	4 th	5 th	Total
MBBS	35	59	58	48	50	250
Allied	25	38	31	41	-	135

Then we performed simple random sampling in each stratum. Structured questionnaire along with a 40 itemed Narcissistic Personality Inventory was used after taking informed verbal consent. Those individuals who scored above 20 points from the available 40 points of NPI-40 Inventory were considered to be having higher levels of Subclinical Narcissism and prone to exhibit socially dislikeable personality traits and those who scored less than and equal to 15 were considered normal. Statement 1, 2, 3, 6, 8, 11, 12, 13, 14, 16, 21, 24, 25, 27, 29, 30, 31, 33, 34, 36, 37, 38 and 39 where answer A was given, scored one point and statement 4, 5, 7, 9, 10, 15, 17, 18, 19, 20, 22, 23, 26, 28, 32, 35 and 40 where answer B was given, scored one point. Second part includes demographic information such as age, gender, parent's educational level, parent's working status, household income, number of family members, number of siblings, type of family, birth order and either lived in hostel or day-scholar were asked.

Statistical package for Social Sciences (SPSS) 23.0 version was used for analysis.

The ethical approval was obtained from Institutional Review Board of FMH College of Medicine & Dentistry, Lahore.

Results

The mean age for all students was 21.23 ± 1.55 years. There were 65% MBBS students and 35% Allied Health Science (AHS) students. Proportion of female students was slightly high (54%) among all the participants, out of which 45.70% females from MBBS students and 8.30% female from AHS as shown in Figure-1.

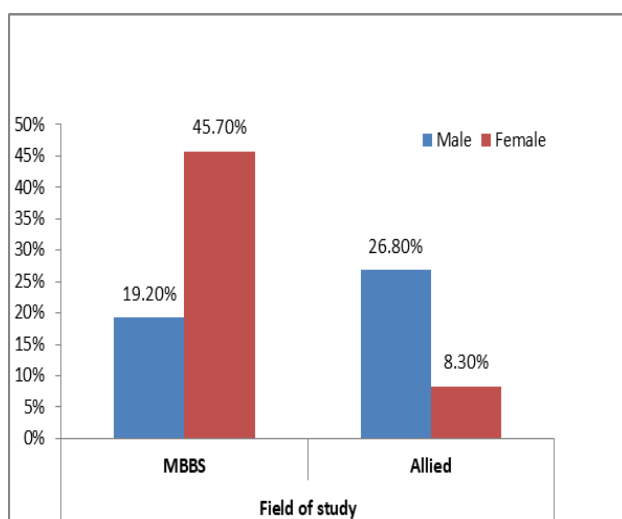


Figure 1: Gender distribution of enrolled students in category of MBBS and Allied Health Sciences. (n=385)

Out of 385 students, 60.8% were day scholars whereas 39.2% were hostelites. Gender, Mothers education, mode of living and academic performance were significantly associated with narcissism. Students academically performing between 60-69%, in the previous academic year, have mostly scored 16-20 on NPI. Last exam percentage was seen significantly associated with narcissism (0.024) (Table-1).

Association of demographic variables with NPI scores showed that high number of participants were from nuclear family and their family income was more than 50,000 per month in both groups (Figure-2).

Mean NPI score of AHS was found to be higher (19.92) as compared to MBBS (14.37). NPI scores among medical and allied students are given in Table-2. Our data showed high NPI score (18.35) in students with no siblings. Scores decrease steadily as number of siblings increases up to 5 i.e. 13.87.

Multiple linear regression was performed to observe the dependence of NPI score on demographic variables. The reference category for gender were male, unmarried and nuclear family type and hostilities were the reference categories (Table-3).

Table 1: Distribution of demographic variables and their association with narcissism.

Variables & categories	Frequency	Percent	p value
<i>Gender</i>			
Male	177	46	< 0.001
Female	208	54	
<i>Fathers education</i>			
Up to matric	31	8.05	0.257
Intermediate	39	10.1	
Bachelors	90	23.4	
Masters & above	224	58.1	
Illiterate	1	0.3	
<i>Mothers education</i>			
Up to matric	84	21.8	0.000
Intermediate	33	8.6	
Bachelors	124	32.2	
Masters & above	140	36.3	
Illiterate	4	1.0	
<i>Family income/month</i>			
<50,000 PKR	20	5.2	0.093
=>50,000PKR	365	94.8	
<i>Mode of living</i>			
Day scholar	234	60.8	0.006
Hostelite	151	39.2	
<i>Percentage in last annual Examination</i>			
30-39%	1	0.2	0.024
40-49%	14	3.6	
50-59%	47	12.2	
60-69%	151	39.2	
70-79%	132	34.2	
80-89%	40	10.3	

A p-value less than or equal to 0.05 was considered significant. Age, gender, no. of siblings and residence were seen as significant factor for NPI scores. The odds for narcissism was 21.98 times higher in males as compared to females. Similarly hostilities were 3.42 times at more risk of narcissism. The negative coefficient of age showed 45% risk for every increasing year of age.

Discussion

Comparison of mean NPI scores of MBBS and Allied Health Sciences (AHS) students shows many differences. Mean NPI score of AHS (19.92) is more than the mean NPI score of MBBS (14.37). This difference may be explained by narcissistic tendencies influenced by a person's environment.¹⁶ The reason for lower NPI scores in MBBS may be that the students of MBBS are in far more competitive and stressful field of study, where rank plays a big role in the interactions between doctors.

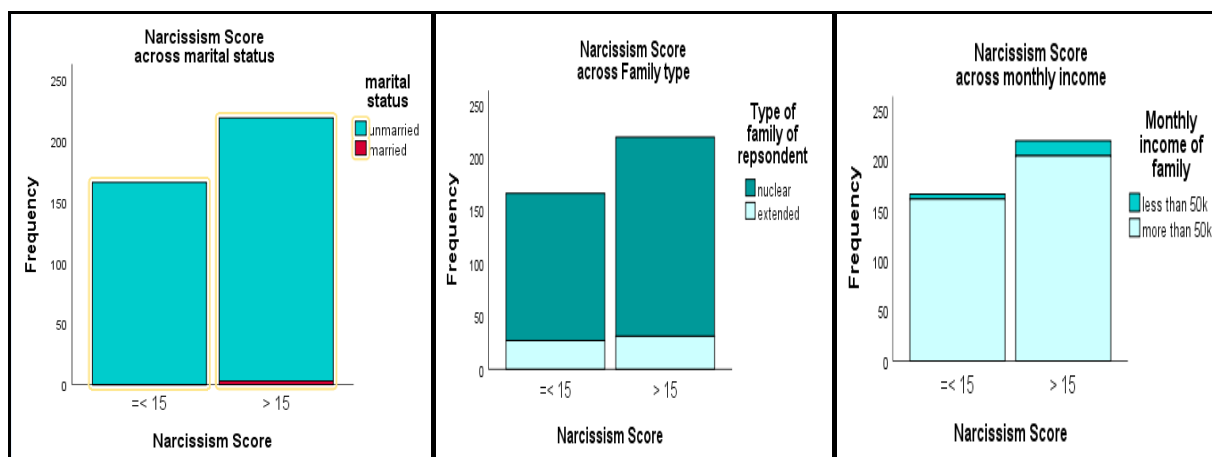


Figure 2: Narcissism score across various demographic factors.

Table 2: NPI score among medical & allied students.

Sr. #	Statement	Medical Students	Allied Health Students	Score ≤15	Score >15
1	I have a natural talent for influencing people.	229	156	59	170
2	Modesty doesn't become one	128	257	20	108
3	I would almost do anything on a dare	135	250	28	107
4	I can usually talk my way out of anything	252	133	34	115
5	I will be success	187	198	118	166
6	I am assertive	149	236	53	129
7	I like to have authority over people	264	121	38	114
8	I find it easy to manipulate people	284	101	22	117
9	I insist upon getting the respect that is due	248	137	44	101
10	I can read people like a book	210	175	45	127
11	I always know what I am doing	182	203	40	108
12	I expect a great deal from other people	152	233	24	117
13	I will be never satisfied until I get what i deserve	139	246	43	119
14	I have a strong will to power	145	240	56	164
15	I like to look at myself in mirror	303	82	78	125
16	I really like to be center if attention	169	216	37	114
17	I can live my life anyway I want to	216	169	55	139
18	I would be preferred to be a leader	242	143	35	135
19	I am going to be a great person	230	155	48	120
20	I am a born leader	279	106	5	89
21	I wish somebody would someday write my biography	148	237	34	133
22	I get upset when people don't notice how I look when I go out in public	195	190	18	108
23	I am more capable than other people	263	122	8	101
24	I know that I am good because everyone keeps telling me so	141	244	22	111
25	If I ruled the world, it would be a better place	162	223	69	129
26	I like to be the center of attention	193	192	25	96
27	I think I am a special person	220	165	29	108
28	I see myself as a good leader	221	164	51	124
29	I like to show off my body	203	182	9	73
30	I like to take responsibility for making decisions	151	234	70	99
31	I want to amount to something in the eyes of the world	194	191	42	101
32	I like to look at my body	257	128	46	109
33	I will usually show off if I get the chance	170	215	20	86
34	I rarely depend on anyone else to get things done	168	217	80	110
35	Everybody likes to hear my stories	220	165	28	94
36	I like to be complemented	94	291	75	117
37	I like to start new fad and fashions	167	218	63	101
38	People always seem to recognize my authority	126	259	34	94
39	I can make anybody believe anything I want to	109	276	43	122
40	I am an extraordinary person	247	138	29	109

Table 3: Multiple linear regression taking NPI Score as dependent variable.

Factors	B	S.E (B)	Exp (B)	P value
Age	-0.60	0.20	0.55	0.00
Gender (Male)	3.09	0.63	21.98	0.00
Marital status (Unmarried)	-4.61	3.51	0.01	0.19
Family type (Nuclear)	-0.62	0.96	0.54	0.52
Family member	0.00	0.21	0.99	0.99
No of Siblings	-0.64	0.32	0.52	0.05
Birth Order	0.45	0.31	1.57	0.15
Residence (Hostelite)	1.23	0.64	3.42	0.05

As a student or young doctor, one cannot show narcissistic behaviour in most situations in the hospital/college setting. MBBS students also have to deal with patients in far more severe conditions which can condition a person to be more humble.¹⁷

Year-wise mean NPI score distribution of MBBS increases from 1st year (14.83) to 3rd year (15.52), but has a significant drop in 4th year (11.81) and then rises slightly again in final year MBBS (13.92). On the other side the year-wise score distribution of AHS is highest in the first year (21.46) and then decreases steadily till the 4th year (17.85). An individual's NPI score does not remain the same throughout life. It varies with age, environment, and other factors influencing an individual's personality. Our findings are consistent with findings of other studies which state narcissistic scores of individual's peak in young adulthood and decrease over time as they mature.¹⁸ Average NPI score of males (18.27) is higher than that of females (14.66). Males are more likely to show authority, superiority, and exploitative behaviour as they often hold more powerful positions in the hospital and medical college.¹⁹ Grandiose narcissism stands out the most in them.¹⁸ Females have to struggle much more, show more submissive behaviour, and settle for lesser positions which explain the lower NPI score. Some studies state that there is great deal of importance placed on women and their beauty in our society and for this reason they score higher on NPI in terms of vanity and exhibitionism.²⁰ Our results are not consistent with this finding, perhaps because females in MBBS are focused on their education and career. This does not allow much time and attention for vanity and frivolousness.

Birth order data shows that 2nd and 3rd child have higher mean NPI scores. Score decreases in children who were the 1st, 4th, 5th, or 6th child. Here, it is perhaps not the birth order that affects the narcissistic traits in a child.²¹ Instead, it may be the amount and type of attention a child receives from his/her parents.²² Parents with

multiple children may favour any particular child more for various reasons, regardless of the order of birth. This is especially obvious in the only child who receives all the attention from his/her parents and has the highest NPI score.

Students with average academic performance have mostly scored 16-20 on NPI, which is higher than the general population.²³ This is explained by studies which state narcissistic students are mostly disengaged from their studies and may be academic underachievers due to their grandiose behaviour and overconfidence.²⁴

Leadership qualities appear higher in MBBS students than Allied students. MBBS students appear to perform well when given opportunities for external affirmation and see themselves as transformational leaders.²⁵ This is supported by the strong will power trait also present in 74% of the MBBS students.

Influencing people and attention seeking behaviour traits are seen more in AHS students (35%) than MBBS students (28%). A research conducted at university of Kentucky, showed a positive relationship between narcissism and attention seeking behaviour. Narcissistic people draw attention to themselves by self-promoting behaviour.²⁶ Similarly, more AHS students (57%) show manipulative traits, 50% claim they can take their way out of any situation and 46.7% demand more respect from people. One study suggests that the behaviour of narcissistic individuals may reflect exaggerated ego or an attempt to mask underlying implicit vulnerability.²⁷ According to an international research, narcissistic people tend to rely on indirect strategies (e.g., trying to win the approval of others) to regulate their self-esteem.²⁸ These cognitive and behavioural patterns displayed by students who have high NPI scores may place them at risk for negative ideas regarding body image.²⁹

Personality Inventory is just determining the scores and on the basis of that scores we identify narcissism in individuals. This type of personality have the feeling of grandiosity for their selves considering others at low level. So after determining these scores we can further work on those individuals in terms of repeated counselling and mentoring sessions.

Students of Allied health sciences exhibit more narcissistic traits than MBBS undergraduates. Narcissistic students can pose a risk to patient care in the future. Medical and allied health institutes should encourage counseling & mentoring sessions for students where they should be taught to overcome such negative personality characteristics. Such tools can be used at the time of admission for early identification and rectification.

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