Original Research Article

Prevalence of illness anxiety disorder (IAD) and somatic symptom disorder (SSD) among medical students with DSM V

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Abstract

Background: New diagnosis guidelines with DSM V categorizes, hypochondrasis (somatoform disorder) into two new groups Illness Anxiety Disorder (IAD) and Somatic symptom Disorder(SSD) depending upon their symptomatic significance by American Psychiatry Association. This study was planned to assess prevalence of IAD andSSD among medical students as they have high chances for meeting in. **Methods:** Cross Sectional study was carried out among medical students of Government Medical College Jagadalpure (C.G.) India. 393 students with 360 respondent been provided with self assessment questionnaire based on HAI (Health anxiety Inventory) and IAS (Illness Anxiety Scale) with predesigned and pretested schedule. Statistical analysis was done on observation on Anxiety index by using Chi - square and FIsher -exact test. **Results:** Prevalence among medical students found as 0.84 % and 2.77% IAD and SSD respe. with no significant association seen for gender and at academic level with new DSM V criteria **Conclusion:** The overall combine prevalence for SSD and IAD found as 3.61 % among medical students. However, this study is not recommended for finding severity and persistent specifier for SSD classification. Further clear approach is needed for its classification with DSM V criteria.
Key Words: illness anxiety disorder, somatic symptom disorder.

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INTRODUCTION

Illness Anxiety Disorder (IAD) formerly known as Hypochondriasis (Somatoform disorder) comes under the category of Somatic symptom and related disorders along with Somatic symptom Disorder (SSD). Person with IAD experiences a "Preoccupation of having or acquiring serious illness for mild or no symptoms, causes high level of health anxiety and continuous body examination. Person with IAD finds it very difficult in trusting negative reports, even after doctor's evaluation and reassurance for their good health. This preoccupation persist for at least six months of excessive fear and anxiety of serious illness[1]. DSM V is new criteria for identifying IAD replaced for hypochondrasis (Somatoform Disorder) which is now been eliminated with criteria DSM IV by American Psychatric Association. Hypochondrasis (Somatoform Disorder) is now divided two types as Illness Anxiety Disorder (IAD) and Somatic symptom Disorder (SSD) based on having significant symptoms or no symptom[1,2]. This study aims for finding prevalence of illness Anxiety Disorder (IAD) among medical students of Govt. Medical College, Rajnandgaon (C.G.). Often person with IAD searches and overuse of medical and laboratories and reads about diseases. This characteristics are more likely seeing in medical students as young aspirant doctors have to learn it all their academic years[3,4], and it is first of its kind in India where new criteria of DSM V used for finding prevalence of Illness

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Anxiety Disorder(IAD)) and Somatic symptom Disorder (SSD) among medical students. This study reviews for estimated observations found in prevalence of IAD and SSD with the DSM V criteria replaced for hypochondrasis[1,5] by American Psychatric Association and by Bailer J. Kerstner. This study also reviews differentiation for gender and academic factor under consideration, with prevalence of IAD and SSD. However previous studies shows no association in between male, female and prevalence of hypochondrasis by Candel I[6].Where as significant association shown in between academic and prevalence of IAD and SSD by R. moss morris in his study[7].

MATERIAL AND METHODS

A targeted population of 393 medical students was under the cross section study. The self assessment questionnaire was based on DSM V guideline and with help of HAI (Health Anxiety Inventory)[8] HAI and (Illness Anxiety Scale) IAL[9,10] provided by American Psychiatric Association[1] covering most of the aspect of IAD and SSD set by a team of clinician expertise on psychiatry research. The questionnaire been distributed by class representatives among their respective classes and were completely unaware of the objective of the study. Out of 393 medical students, 360 (91.60%) were attentively respondent distributed with ratio 1:1 at gender and academic level. After ethical committee permission the study took two weeks time from 20/8/2017 to 4/9/2017 for its data collection and compilation. Based on guidelines provided by American Psychiatric Association for diagnosis criteria of DSM V, cases are identified with Health anxiety Index measured by HAI and IAS with their retest reliability r= 0.89] and r=0.81 resp[11], with 64 questions each containing four option for range 0-3, total 0-192 score and 27 for IAS, total 0-108 score. After results, cases with characteristic for disorder, are separated for IAD and SSD, on basis of their symptomatic positive significance. Inter rarity for agree and disagree was taken into consideration on both judgments. Medicine physician and psychiatry clinician both were agree with their inclusion and exclusion of cases for significant symptoms (Cohen's K=1). The results are formulated on basis of self assessment with team of clinical psychologist and medicine consultant. Table 1 shows distribution of medical students with gender and at academic level.

RESULTS

Table 1: Distribution of Medical Students with Gender and Academic level

Academic year	Gender		Total Respondent	Total Students
	Male (%)	Female (%)	n	N
1 st Year	54 (60.67 %)	35 (39.33%)	89	99
2 nd Year	34 (36.55%)	59 (63.45 %)	93	100
3 rd Year	47 (52.80%)	42 (47.20 %)	89	97
4 th Year	50 (56.18%)	39 (43.82 %)	89	97
Total	**185 (51.38%)**	**175(48.62%)**	**360**	**393**

All the results are calculated by using SPSS Statistical software Version 22. With statistical test chi squared and Fisher exact test are used for analytical results. Prevalence found for characteristic symptoms of IAD (Illness Anxiety Disorder) and SSD (Somatic Symptom Disorder) are 0.084 % and 2.77 %. respectively. Table 2 shows weak statistical significance for male and female with fear of disease as P-value (0.0457<0). While there is no association found at academic level for fear of diseases among medical students.

Table 2: Fear of disease among medical students developing their symptoms against Gender and at academic level

Gender	No Fear, No symptoms	Lesser fear for symptoms	Excessive Fear of serious illness for symptoms	P- value	Total No. of Students
Male	71 (38.37%)	101 (54.59%)	13 (7.02%)	0.0457<0.05	185
Female	46 (26.28 %)	112 (64%)	17 (9.71%)	**Significant**	175
Academic year					
Basic Year (1st and 2nd Year)	56 (30.76%)	108 (59.34 %)	18 (9.89)%	0.4937 > 0.05 **Insignificant**	182
Clinical Year(3 rd and 4 th Year)	61 (34.26 %)	105(58.98 %)	12(6.74%)		178
Total	**117(32.5%)**	**213(59.16%)**	**30(8.33) %**		**360**

Table 3: Visit to the doctors for medical condition and trusting on reassurance for good health against Gender and Academic level

Gender	Regular visits to the consultant and trusting on reports and physician	Rarely visits to the clinician trusting on reports or not consult and self medicated	Frequently visits to doctors or no consult due to fear and also difficulty in trusting reports	P- value	Total No. of Students
Male	136 (73.51%)	31 (16.75%)	18 (9.72%)	0.2796 > 0.05 **Insignificant**	185
Female	134 (76.57%)	18(10.28%)	23(13.14 %)		175
Academic year Basic Year (1st and 2nd Year)	138 (75.82%)	19 (10.43%)	25 (13.73)	0.103 > 0.05 **Insignificant**	182
Clinical Year(3 rd and4 th Year)	132(74.15 %)	30(16.85 %)	16 (8.98%)		178
Total	**270 (75%)**	**49 (13.61%)**	**41 (11.38%)**		**360**

Table 4: Preoccupation thought of a serious illness with anxiety against gender and Academic level by using chi- square test

Gender	No preoccupation of serious diseases during illness	No Preoccupation but high level of anxiety and distress during illness	Preoccupation of serious illness and excessive fear and anxiety for Six months or more	P- value	Total No.of Students
Male	152 (82.16%)	28 (15.13%)	5 (2.70%)	0.3225 > 0.05 **Insignificant**	185
Female	133 (76%)	34 (19.42 %)	8(3.78 %)		175
Academic year Basic Year (1st and 2nd Year)	141 (77.47%)	33 (18.13%)	8 (4.39%)	0.9377 > 0.05 **Insignificant**	182
Clinical Year (3^{rd} and 4^{th} Year)	144 (80.89%)	29 (16.29%)	5 (2.80 %)		178
Total	**285 (79.16%))**	**62(17.22%)**	**13 (3.61%)**		**360**

Table 5 and 6 shows the gender wise and academic distribution of SSD and IAD found with for male and female and Academic level with 2.77% and 0.83% For SSD and IAD respectively and shows no association for gender and academic year.

Table 5: Health Anxiety Index (HAI and IAS) and distribution with gender and academic level

HEALTH ANXIETY INDEX	HAI Mean (SD)	IAS Mean (SD)	Significant symptoms (SSD) n_1 = 10 (%)	NO or mild symptoms (IAD) n_2= 03 (%)
Cases n_1=13 (3.61%) Hypochondriac	105.9 (20.9)	59.7 (11.5)	GENDER Male 04 (30.76%) Female 06 (46.15%)	Male 01 (07.69 %) Female 02 (15.38%)
Control n_2=347 (96.38%) Healthy	30.3 (13.3)	21 (8.65)	ACADEMIC Basic 04 46.15%) Clinical 06 (30.76%)	Basic 02 (15.38%) Clinical 01 (07.69 %)

Table 6: Association between SSD and IAD with Gender and Academic by using fisher Exact test

GENDER	SOMATIC SYMPTOMS DISORDER (SSD)		P- Value
	PRESENT	ABSENT	
MALE	04 (1.11%)	181(50.27%)	0.4649 Insignificant
FEMALE	06 (1.66%)	169 (49.72%)	
TOTAL	10 (2.77 %)	350 (97.22 %)	
	ILLNESS ANXIETY DISORDER (IAD)		P- Value
GENDER	PRESENT	ABSENT	
MALE	01 (0.0277 %)	184 (51.11%)	0.5298
FEMALE	02 (0.0555 %)	173 (48.05%)	Insignificant
TOTAL	03 (0.083 %)	357 (99.16 %)	

ACADEMIC	SOMATIC SYMPTOMS DISORDER (SSD)		P- Value
	PRESENT	ABSENT	
MALE	04 (1.11%)	181(50.27%)	0.4649
FEMALE	06 (1.66%)	169 (49.72%)	Insignificant
	ILLNESS ANXIETY DISORDER (IAD)		P- Value
ACADEMIC	PRESENT	ABSENT	
MALE	01 (0.0277 %)	184 (51.11%)	0.5298
FEMALE	02 (0.0555 %)	173 (48.05%)	Insignificant

DISCUSSION

IAD is a medical condition where person preoccupies the condition of having serious illness and lives in extreme anxiety and fear however his or her symptoms shows no medical significance and its more in mind of a person. Even a mild or no symptoms in a body causes continuous examination and health anxiety and health concern for a person that eventually turns out for frequent visits to the physician also negative reports and doctors reassurance does not satisfy the condition of a person for his good health, some avoids to consult the physician due to excessive fear of life threatening or serious disease. This preoccupation persist for at least six months[1]. Previously this condition was known for hypochondrasis (somatoform disorder) is now eliminated by American Psychiatric Association with DSM IV criteria and newly referred as somatic symptom and related disorder, with the new diagnosis criteria of DSM V. As hypochondrasis name was perceives pejorative and not conductive for therapeutic relationship they been parted with entities as Somatic Symptom Disorder (SSD) and with high health anxiety with somatic symptoms and and Illness Anxiety Disorder (IAD) without somatic symptoms[2]. Often person with this disorder searches for information related to diseases and continuously discuss about it. This tendency most likely found in medical students as they have to go through all their academic years reading about it[3,4]. In this study prevalence among medical students for illness anxiety disorder was observed as 0.84. % and Somatic Symptom Disorder (SSD) was observed as 2.77 % with DSM V Criteria. which combines to give figure of 3.61 % for prevalence of hypochondriasis which is close to previous study of prevalence for hypochondrasis among medical students by Yousef A Al- Turki *et al.*[12] In other studies prevalence of hypochondrasis was found in between 0.8 to 4.5% among primary care patients using DSM IV by Magarinos M *et al*[13] This study reveals 76.92 % for SSD and 23.07 % for IAD which is close to the finding prediction values by Bailer J. Kerstner[5] *et al* in his study. It also forms strong basis to the observations as roughly estimated prevalence was given 75 % for SSD and 25% for IAD by American Psychiatry Association[1]. But however study is not suitable assessing prevalence for Somatic Symptom Disorder (SSD) as there are lots of complication for identifying acute, integrated and complicated grief for mental and physical stress, anxiety and pain period of time, with new criteria DSM V previously discussed by M. Katherine Shear *et al*[14]. The study shows that fear for disease are more in common in female (73.71%) than male 61.61% with very weak significance to show which is similar to the other study where although no significance was found, but fear phobia and hypochondriacal concern were more commonly found in females than men by G Blichha Rahh *et al* in his study[16]. Study reveals no significance in terms of association in IAD prevalence in male 0.027% and female (0.055%) as (P=0.46>0.05) and SAD prevalence in male (1.11%) and female (1.66%) as (p=0.52%). However in some studies there found high significant association for gender and hypochondrasis prevalence among medical students[15].In another study increasing prevalence was found for female based on a study, in Germany by Magarinos M *et al* by G Blichha Rahh *et al* in their respective studies[12,16]. Study also shows observation of increasing percentage in basic year 15.38 % as compare to clinical year with 7.59 % in IAD and increasing 46.15 % compared to 30.76 % in SSD resp., however it shows no significance (as p=0.5298) for its prevalence (0.0277%) and (0.0555%) for IAD; and 1.11% and1.66% as (p= 4649 >0.05) for SSD for basic and clinical year respectively. While other study base on academic levels shows significant values for third year students by R. moss morris *et al*[7]. While some study supports results of no significance at gender and academic level[6,11]. No other variable except fear for diseases shown significance for gender and at academic level.

CONCLUSION

Study shows prevalence for IAD and SSD, it is good for finding its prevalence in population for IAD but not conclude the results for severity and persistent specifiers as its classification in DSMV for B1 B2 andB3 as mild severe and very sever resp. is often vogue and counter parting on assessment of patients. It recommends its more clear specifying for severity of pain in SSD with larger sample for study.

REFERENCES

1. American Psychiatry Association; Diagnostic and Statistical Manual of Mental Disorder 5 th Edition: 2013 Arlignton va : Author.
2. Highlight of changes DSM IV TR to DSMV: American Psychiatry Association.
3. Nosophobia Hypochondrasis in medical students. J Nerv. Ment. Dis.1964:130147-52, Hunter RCA: Author.
4. Medical student disease: Hypochondriasis in medical education. J Med Edu 1966; 41:785-91, Woods SM Author.
5. Health Preoccupation diagnostic interview inter-rater reliability of structured of structured interview for diagnostic assessment of DSM5 Somatic System Disorder and Illness Anxiety Disorder.Bailer J. Kerstner.
6. Fantasy proneness and thought suppression as predictors of the medical Student Syndrome. Personality and individual differences 2003, 35: 519-24 Candel I: Author.
7. Redefining Medical student's disease to reduce morbidity medical edition: 2001 Aug (8) 724-8 Pub Med PMID: 11489098. R. moss morris. : Author.
8. The health anxiety inventory: Development and validation of scales for the measurement of health anxiety and hypochondrasis Psychol Med 2002, 32: 843-55 (PUBMED). Salkovskis PM : Author
9. Hiller W. Janca A. Assement of somatoform Disorer : A review of stratergies andinstruments Acta Neuropsychitrica 2003;15167-79 Author : Hiller W. Janca A.
10. Sir L, Grandi S The illness attitude scale, Psycholher Psychosom 2008 : Sir L, Grandi S Author : Hiller W. Janca A
11. Hypochondriacal concerns and attitudes toward illness males and females: Hernandez Jetal. Int J Psychiatry Med.: Author.
12. Prevalence of hypochondrsis among medical students at King Saud University: 2013 (ISSN 2301-2218) Yousef A Al- Turki : Author.
13. Epidemiology and treatments of hypochondrasis, CNS drugs. 2002; 16 (1) :9-22 Pub Med PMID :17931470 Magarinos M :Author.
14. Depress Anxiety, complicated grief and related bereavement issues for DSM-V 2011 Feb 103-117. PMCID: PMC3075805: M. Katherine Shear Author.
15. Hypochondrsis in medical science students of Mashhad, Iran Europian psychiatry Mae 2009.24. : Talaei A. Author
16. Hypochondrsis and Health Anxiety in the German population, G BlichhaRahh. : Author.

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