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KNOWLEDGE, ATTITUDE, AND PRACTICE OF DEPRESSION AND MANIA IN BIPOLAR DISORDER AMONG PHARMACY STUDENTS

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Abstract

Mania and depression are characteristics of bipolar disorder, formerly known as manic depression. In children and teenagers, depression frequently becomes a long-term illness. Teenagers and people with a history of mania were frequently observed to have mixed mania, especially females. The DSM of Mental Disorders was also expected to apply to about half of the hypomanic and manicpatients.Mixed feature specifies in the 5 Editionwith a sizable female predominance. ***Methods:***It is a cross-sectional study,with a sample size of 145 participants.The study participants areB. Pharm, Pharm. D 2nd and above and alsoM.pharm students.The study instrument used is a validated questionnaire, circulated to the participants. The questionnaire consists of 4 sections.Thedata is collected and analyzed.***Results:***In our study questionnaire was circulated among 145 participants from pharmacy students. The study result showed that pharmacy students have knowledge, attitude, and practice about depression and mania in bipolar disorder. ***Conclusion:***Most of our study participants were aware of bipolar disorder, risk factors, causes and symptoms of bipolar disorder. Both Males and Females haveSatisfactory knowledge, Attitude, and practice. So, improve knowledge Attitude and Practice of the disease and help in the betterment of the society. Recommend the provision of schools and training programs in the area of mental health, to increase the number of mental health professionals. Furthermore, the creation of awareness education programs on mental illnesses.

Keywords: Bipolar disorder, Depression, Mania, knowledge, attitude, practice, Mixed states

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INTRODUCTION:

Manic depression, or bipolar disorder, is a psychiatric disorder marked by emotional peaks (mania or hypomania) and valleys (depression). The patient may exhibit symptoms that includes feeling hopeless or despondent, losing interest in or enjoyment from most activities, or acting unusually enthusiastic, energetic, or irritable. whenever you experience mania or hypomania (a milder form of mania). Mood swings can affect a variety of things, including sleep, energy, activity, judgment, behavior, and the capacity for clear thought.[1] a lifelong degenerative disease that requires intensive care. Rapid recycling (four maybe more episodes) of repeated mood swings may make it harder for certain patients to regain.[2]Although medicine is the predominant form of treatment, "talk" therapy or psychotherapy may also be recommended on occasion to help prevent recurrent episodes. Several medicines can be used to treat it. The recommended treatment recommendations are based on the three major parts of bipolar disorder: acute manic or mixed mood states, acute periods of severe depression, and finally the continuation/maintenance phase. Avoiding antidepressants and taking two mood stabilizers has proven to be an effective strategy for the majority of patients.[3]The most frequently prescribed drugs in the acute setting are lithium, some anticonvulsants (valproate, carbamazepine), standard antipsychotics (e.g., haloperidol, chlorpromazine), atypical antipsychotics (e.g., quetiapine, olanzapine, risperidone, ziprasidone, aripiprazole, clozapine), and benzodiazepines (e.g., lorazepam, clonazepam).[4] One of the most treatable types of mental disorders is depression. In the long term, between 80% and 90% of depressed people benefit from therapy.[5] In kids and teens, depression is widespread as well as dangerous, and it frequently signals a lifelong pattern of illness and disability.[6]Marital issues with family, friends, and partners are associated with depression, as are lower socioeconomic status, educational achievement, and a higher risk of death by suicide. As part of the original 1998 special series in the Journal of Clinical Child Psychology, Kaslow and Thompson conducted the first evidence-based therapy (EBT) review in the field of pediatric depression.[7] Depression is characterized by a generalized feeling of melancholy, anhedonia, avolition, worthlessness, and hopelessness. There are also cognitive symptoms such as difficulty focusing, memory problems, anorexia, and aberrant sleep patterns.[8]In rare cases, a hematologic examination may be necessary to confirm that an illness as a thyroid issue or a vitamin deficiency—is not to blame for the depression.[9] The evaluation will consider specific symptoms, analyze medical and family histories, as well as cultural and environmental factors, with the goal of to make a diagnosis and plenty[10] A manic episode, often called a manic phase, lasts one week or longer and is characterized by a person's behavior changing drastically and negatively affecting their ability to operate. Hypomania differs from mania in that it lasts at least four days rather than a week and does not significantly impair social or occupational functioning. Mania lasts at least one week. Increased talkativeness, rapid speech, a decreased need for sleep, racing thoughts, distractibility, an increase in goal-directed activity, and psychomotor agitation are characteristics of mania.[11]Successful medications include risperidone, olanzapine, and haloperidol, for instance. Aripiprazole, lithium, and quetiapine were also said to be efficient. Ziprasidone, carbamazepine, and valproic acid all outperformed the placebo but underperformed their rivals. In comparison to placebo, gabapentin, lamotrigine, and topiramate had no effect on mania. Though they are less frequently used, clozapine and electroconvulsive therapy have

demonstrated several advantages in the treatment of treatment-resistant mania. Bipolar disorder is a chronic recurring illness marked by swings in energy and mood. Regardless of nationality, ethnic background, or socioeconomic status, it affects more than 1% of the world's population. One of the main causes of disability in young people, bipolar disorder increases mortality and impairs cognitive and functional abilities. Affected people frequently have a high prevalence of psychiatric and medical co-morbidities. Because the development of bipolar disorder typically coincides with a depressive episode and resembles unipolar depression, accurate diagnosis of the condition is challenging in clinical settings. [12] The most current developments in the short- and long-term management of bipolar disorder are explored, along with potential future therapeutic avenues. Treatment for drug addiction has often advanced slowly. Antipsychotic drugs are effective in the short-term therapy of mania, however, there is conflicting data regarding how well they work in the treatment of depression, with quetiapine having the strongest support. Antidepressants are frequently used, although there is still much controversy and scepticism around their efficacy in treating depression.[13] The results for anticonvulsants like divalproex and lamotrigine are less strong, and there is a lot of uncertainty about the long-term advantages of antipsychotics. The greatest evidence for long-term relapse prevention comes from lithium. Adjunctive psychological therapies have developed and undergone examination substantially.[13] Teenagers and those who have had prior mania were usually seen with mixed mania, especially women.[4] Overall, these screening methods can help doctors identify mixed symptoms of sadness and bipolar disorder. In a previous study on the SFBN cohort, mixed depression—defined as an IDS-C score of 15 and a YMRS score of >2—was also found.[14] Most bipolar disorder sufferers experience depressive phases 3 times more frequently than manic ones. Subjects who reported a higher manic symptom load also reported significantly more depressive symptoms [15] In the research on depression and mania in bipolar disorder, Alan C. Swann, MD et al. (2008) conducted to the following conclusion: The relationship between impulsivity and manic and depressive symptoms appears to be different. Attentional cognitive impulsivity increases with both depression and mania, whereas motor impulsivity increases with mania and no planning impulsivity increases with depression. Impulsivity was strongly associated with hyperactivity in mania, but it was associated with anhedonia or despair in depression. Possibility of a stronger connection abetweenmotivation or action and emotional mood.[13] Mixed states are very prevalent among children and teenagers. However, methods for measuring them differ, and additional study is required to demonstrate diagnostic consistency. Mixed states also exhibit high rates of comorbidity with common juvenile mental illnesses. To summarize, contrary to the widely held idea that mood disorders only swing from depression to mania, mixed moods should be investigated in infancy and considered a critical component of pediatric BD. [16]

METHODOLOGY:

A cross-sectional study was conducted among pharmacy students.The sample size of this study is 145.This study will provide awareness of depression and mania in bipolar disorder among the pharmacy students. The participants who are willing are only included in the study. The questions were prepared and will be entered in the Google form and then they will be circulated to the participants through the links on social media. The data collection periodis from Jan 2022- to May 2022. The questionnaire will contain four

sections of questions with section A containing socio-demographic details, section B containing questions on knowledge, section C containing questions on Attitude, and section D containing questions on Practice. The completed questionnaires will be collected and recorded accordingly.The data analysis has been performed using an MSExcel sheet.

RESULTS:

The study was circulated among 145 participants. They were categorized based on their age, gender, and degree

Socio-demographic details:

Age characteristics of respondents:

Figure 1 shows the pie chart of the participants' ages. 145 participants responded. In this study, 4 participants belong to the age group of 18 years,2 participants belong to the age group of 19 years, and 13 participants belong to the age group of 36-45 years. This shows that the majority of the responses are received from the age group of 18-35 years

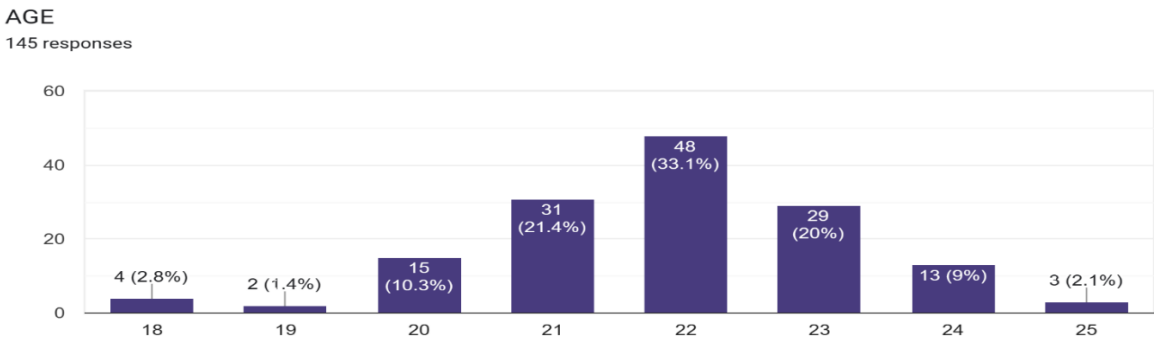

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Figure 1- Age characteristics of respondents

Gender characteristics of respondents:

Figure 2 depicts a pie chart showing the gender distribution of the participants. Out of 145 participants, 78 were male (54%) and 67 were female (46%) respectively. It clearly shows that male participants responded more than female participants.

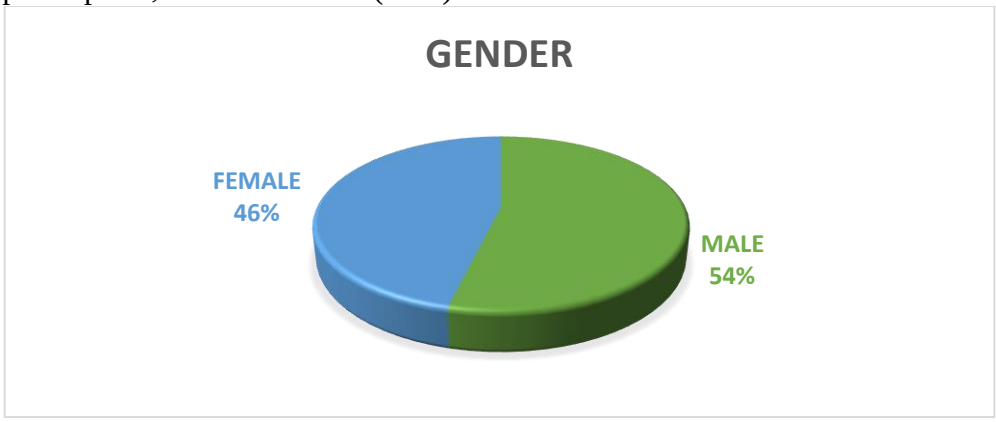

Figure 2-Gender characteristics of respondents

Educational Qualification of respondents:

Figure 3 shows the pie chart of the qualification information of the Participants. The participant's educational qualifications include High school, undergraduate, postgraduate, and no educational qualification.31(14.2%) participants were from High school 111 (50.9%) were undergraduate,62(28.4%)

participants were postgraduate,40(6.4%) participants were government servants, and 21(9.6%) participants did not have educational qualifications. This demonstrates that most of the respondents are undergraduates compared to other qualifications.

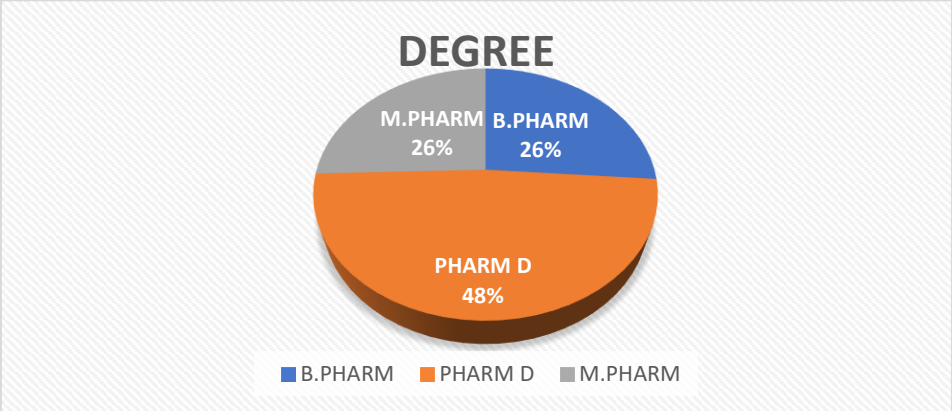

Figure-3 Qualification of respondents

TABLE-1: KNOWLEDGE REGARDING DEPRESSION AND MANIA IN BIPOLAR DISORDER:

S.NO	Knowledge of depression and mania in bipolar disorder.	MALE		FEMALE		CHI-SQUARE TEST (P)
		N	%	N	%	A- Symptomatic Significance(2-Sided)
1.	**Bipolar disorder is**					
	a mental illness, also known as manic-depressive disorder	67	85.8%	59	88.0%	0.365
	a type of mental illness related to eating disorders	7	8.9%	4	5.9%	
	a form of depression that occurs only following pregnancy	4	5.13%	2	2.9%	
	a form of depression that occurs only during the winter months	0	0.0%	2	2.99	
2.	**The category of drugs used for the management of bipolar disorder is**					

	mood stabilizers	12	15.3%	7	10.4%	**0.038***
	anti-depressants and psychosocial interventions	18	23.0%	5	7.46%	
	anti-psychotics and somatic treatments	5	6.4%	5	7.46%	
	all the above	43	55.1%	50	74.6%	
3.	**Which of the following symptoms of BD is considered a high-risk factor**					
	Overeating	9	11.5%	2	2.9%	**0.034***
	Diabetes	13	16.6%	4	5.9%	
	Disruption in the sleep-wake cycle	50	64.1%	55	82.0%	
	too much salt in the bloodstream	6	7.6%	6	8.9%	
4.	**Another term for bipolar disorder**					
	Schizophrenia	5	6.4%	3	4.4%	0.903
	Paranoid schizophrenia	7	8.9%	6	8.9%	
	Manic depression	57	73.0%	48	71.6%	
	Multiple personality disorder	9	11.5%	10	14.9%	
5.	**ECT (Electroconvulsive therapy) is recommended for**					
	Bipolar depression not responding to adequate pharmacotherapy	11	14.1%	18	26.8%	0.175
	It is recommended for both BD Bipolar depression not responding to adequate pharmacotherapy and Bipolar depression responding to adequate pharmacotherapy	32	41.0%	19	28.3%	

	Bipolar depression responding to adequate pharmacotherapy	5	6.4%	6	8.9%	
	All the above	30	38.4%	24	35.8%	

The symbol(*) indicatesStatisticalsignificance.

TABLE:2-ATTITUDE REGARDING NON-COMMUNICABLE DISEASES:

S.NO	**The attitude of depression and mania in bipolar disorder.**	**MALE**		**FEMALE**		**CHI-SQUARE TEST**
		N	%	N	%	**A- Symptomatic Significance(2-Sided)**
1.	**Healthcare professional consulting the very important in the case of bipolar disorder**					
	Strongly agree	50	64.1 %	34	50.7%	0.074
	Agree	18	23.0 %	28	41.7%	
	Neutral	6	7.6%	5	7.4%	
	Disagree	2	2.5%	0	0.0%	
	Strongly disagree	2	2.5%	0	0.0%	
2.	**Early management of BD will greatly help to cure it more easily.**					
	Strongly agree	46	58.9 %	26	38.8%	**0.018***
	Agree	19	24.3 %	33	49.2%	
	Neutral	8	10.2 %	7	10.4%	
	Disagree	3	3.8%	0	0.0%	
	Strongly disagree	2	2.5%	1	1.49%	
3.	**It is very difficult to counsel a patient with bipolar disorder**					
	Strongly agree	35	44.8 %	22	32.8%	0.412
	Agree	26	33.3 %	21	31.3%	
	Neutral	13	16.6 %	19	28.3%	
	Disagree	3	3.8%	4	5.9%	
	Strongly disagree	1	1.2%	1	1.4%	

4.	**Lifestyle changes will greatly help to manage bipolar disorder**					
	Strongly agree	41	52.5 %	19	28.3%	**0.016***
	Agree	23	29.4 %	32	47.7%	
	Neutral	10	12.8 %	14	20.8%	
	disagree	4	5.1%	1	1.4%	
	Strongly disagree	0	0.0%	1	1.4%	
5.	**Bipolar disorder can be cured easily**					
	Strongly agree	27	34.6 %	10	14.9%	**0.025***
	Agree	16	20.5 %	25	37.3%	
	Neutral	24	30.7 %	18	26.8%	
	disagree	9	11.5 %	9	13.4%	
	Strongly disagree	2	2.5%	5	7.4%	

TABLE-3: PRACTICE REGARDING NON-COMMUNICABLE DISEASES:

S.NO	**Practice of depression and mania in bipolar disorder.**	**MALE**		**FEMALE**		**CHI-SQUARE TEST**
		N	%	N	%	**A- Symptomatic Significance(2-Sided)**
1.	**Have you ever interacted with a bipolar disorder patient?**					
	Yes	41	52.5%	25	37.3%	0.066
	No	37	47.4%	42	62.6%	
2.	**Have you ever differentiated normal mood swings from that in bipolar disorder patients?**					
	Yes	54	69.2%	35	52.2%	**0.036***
	No	24	30.7%	32	47.7%	

3.	**It is difficult to know when someone who's diagnosed with bipolar disorder is feeling manic or depressed.**					
	Yes	62	79.4%	51	76.1%	0.626
	No	16	20.5%	16	23.8%	
4.	**Have you ever read "Diagnostic and Statistical Manual of Mental Disorders" published by American psychiatric association?**					
	Yes	50	64.1%	36	53.7%	0.205
	No	28	35.8%	31	46.2%	
5.	**Bipolar disorder can be cured easily**					
	a. Yes	55	70.5%	46	68.6%	0.808
	b.No	23	29.4%	21	31.3%	

DISCUSSION:

Bipolar disorder, formerly known as manic depression, is a mental health illness that involves emotional highs (mania or hypomania) and lows (depression). The patient may present with symptoms like gloomy or hopeless depressed, loss of interest or pleasure in most activities feeling ecstatic, full of energy, or abnormally irritable. When mood switches to mania or hypomania (a milder form of mania). Sleep, energy, activity, judgment, conduct, and the ability to think clearly can all be affected by mood fluctuations as explained by Grande *et al.*, in the article on Bipolar disorder.[17]

The following study was conducted online with the help of google forms to acknowledge the knowledge, attitude, and practice about depression and mania in bipolar disorder among pharmacy students in Pharmacy Department, VISTAS, Pallavaram. via social media Total number of participants is 145. The demographic details collected were gender wise 78 were male (53.8%) and 67 were female (46.2%).

A total of145 participants responded to the study survey. this study included the study. This study included participants from three pharmacy degrees such as B. pharm, Pharm D and M. Pharm.

The participants were between the age group of 18-25 years. About 78 were male (53.8%) and 67 were female (46.2%)

The knowledge, attitude, and practice of the study population were compared

between the male and female participants with reference to DM Ndetei et al (2011) [1]

The study on KAP is important among developing countries because mental well-being is an essential aspect of public health. Analyzing the extent of knowledge, attitude, and practice among pharmacy students. WHO are essential health care providers in clinical setup. It will depict the overview to develop strategies to enhance the prevention and management of mental health problems.

On analyzing the results, the study population's poor knowledge, practice and satisfactory attitude were found. The negative reports clearly state that there is limited training or awareness among the studentsstudy population this is in relation to another study by Mulangoet.al (2018) among pharmacy health care provides.[18]

However, the students had significant knowledge on drug class and risk factors. Impact lifestyle changes has a significant attitude among the study population. Overall, there is a poor practice observed in the study populations.

The study on Knowledge, attitude and practice of depression and mania in bipolar disorder among pharmacy student in VISTAS, pallavaram can help to assess the KAP status of Knowledge, attitude and practice of depression and mania in bipolar disorder among pharmacy student so that the information can be used to develop a better and need based program for the VISTAS.

CONCLUSION:

As regards the results of this study, KAP of depression and mania in bipolar disorder among pharmacy students. Our study population included 145 participants of Male and Female in a VISTAS. As per the study results the study participants have good knowledge, Attitudes and Practice towards of depression and mania in bipolar disorder among pharmacy students. Most of our study participants were aware about bipolar disorder, risk factors, causes and symptoms of bipolar disorder. Both Male and Female haveSatisfactory knowledge, Attitude, and practice. Compared to Male and Female have much better knowledge, Attitude and Practice. So, improve knowledge Attitude and Practice of the disease and help in the betterment of the society.

Recommend the provision of schools and training programs in the area of mental health, to increase the number of mental health professionals. Furthermore, the creation of awareness education programmes on mental illnesses.

Educational intervention programs in areas of mental health to improve the knowledge, attitudes and practices of PHCPs towards depression is paramount. If this is implemented, PHCPs will be more confident in dealing with depressed cases. Previous studies have shown that continued medical education is linked to better diagnosis and management of depressed patients.

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