# JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR) An International Scholarly Open Access, Peer-reviewed, Refereed Journal

# "A STUDY TO EVALUATE THE EFFECT OF PLANNED TEACHING PROGRAMME ON MANAGEMENT OF ADVERSE EFFECT OF LITHIUM DRUG IN TERMS OF KNOWLEDGE AMONG THE CARE GIVERS OF THE PATIENTS WITH MOOD DISORDER IN SELECTED PSYCHIATRIC HOSPITALS OF AHMEDABAD CITY,GUJARAT."

## Bhavi Dhi<mark>rajkumar Panchal,</mark>

2<sup>nd</sup> year m.sc nursing, Department of Psychiatry, JG college of nursing, Ahmedabad, Gujarat.

# ABSTRACT

**Study**: to evaluate the effect of planned teaching programme on management of adverse effect of Lithium drug in terms of knowledge among the care givers of the patients with Mood disorder in selected Psychiatric hospitals of Ahmedabad city, Gujarat.

**Introduction**: In India, it is estimated that nearly one-third of patients seeking help from healthcare facilities could have symptoms related to depression, and the crude prevalence rate of mood disorder was estimated to vary from as low as 0.5 to as high as 78 per 1000 population.

In Gujarat, incidence rate of bipolar mood disorders in adolescent male and female is about 10-14 males per 100000 and 10-12 female per 100000 according to **DSM-IV** (**Diagnostic statistical manual of mental disorders**).

A safe blood level of lithium is **0.6 and 1.2 mill equivalents per liter (mEq/L).** Lithium toxicity can happen when this level reaches **1.5 mEq/L or higher**.

Care givers play important roles in the care of patients including contribution to decision-making, assisting the health-care team in providing care, improving patient safety and quality of care, assisting in home care, and addressing expectations of patient's family and society at large.

**Background:** Lithium affects the flow of sodium through nerve and muscle cells in thebody. Sodium affects excitation or mania. Lithium a mood stabilizer that is a used to treat or control the manic episodes of bipolar disorder (manic depression). The symptoms of Lithium toxicity are gastro-intestinal effects (anorexia, nausea and Diarrhoea) and

#### © 2023 JETIR July 2023, Volume 10, Issue 7

CNS effects (muscle weakness, drowsiness, ataxia, course tremor and muscle twitching). At levels above 2 mmol/L, seizures and disorientation may occur, sometimes can progress to coma and death.

**Objective:** The aim of the study was to evaluate the effect of planned teaching programme regarding management of adverse effect of Lithium drug in terms of knowledge among the care givers of patient with Mood disorder and to find out the association between selected demographic variables with the pre-test knowledge score.

**Methods**: A pre-experimental (one group pre-test post-test) design was adopted for collecting the data from 60 Samples using a structured self-administered knowledge questionnaire comprising 30 questions which includes knowledge, application and comprehensive domains. Non- probability Purposive method use for data collected.

**Results**: According to the findings, the mean post-test knowledge score was 17.58 significantly higher than the mean pre-test score 10.45 knowledge score with a mean Difference of 7.13. The calculated't' value (22.528) was greater than the tabulated't'value (2) at 0.05 level of significance. Therefore the null hypothesis  $H_0$  was rejected and research hypothesis  $H_1$  was accepted and it revealed that the planned teachingprogram was effective in increasing knowledge among the care givers of the patientwith mood disorder. The findings also revealed that age, gender, area of residence andrelationship with patient has significant association with Pre-test knowledge score. Hence, the research hypothesis (H<sub>2</sub>) was accepted.



Figure 5: Bar graph showing Frequency wise distribution of Demographic Variables of Care givers

Table 4.2.1 Frequency and Percentage distribution of the pre-test and post-testknowledge score measured by Structured self-administered knowledgequestionnaire regarding management of adverse effect of lithium drug.

### © 2023 JETIR July 2023, Volume 10, Issue 7

www.jetir.org (ISSN-2349-5162)

KNOWLEDGE SCORE	PRE-TEST KNOWLED	GE SCORE	POST-TEST KNOWLED	POST-TEST KNOWLEDGE SCORE		
	Frequency	Percentage (%)	Frequency	Percentage (%)		
POOR KNOWLEDGE (0-10)	35	58.33%	2	3.33%		
AVERAGE KNOWLEDGE(11-20)	25	41.67%	44	73.33%		
GOOD KNOWLEDGE (21-30)	0	0%	14	23.33%		
TOTAL	60	100%	60	100%		



Figure 6:-Bar Graph showing the Comparison of Pre-test and Post-test Knowledge score of Care givers

Table 4.2.3 Mean, Mean difference, Standard deviation (SD) and t' test value of the pre-test and post-test knowledge scores of samples.

Questionnaire tool	Mean score	Mean difference	SD	Calculated 't' value	Table value	DF	Level of signification
Pre-test	10.45	7.13	3.15	22.528	2.00	59	Significant
Post-test	17.58	1	3.14				

© 2023 JETIR July 2023, Volume 10, Issue 7



H'

Association of pre-test knowledge score with selected Demographic variables.

S	DEMOGI	RAPHIC				-			
R	VARIABI	LES				ne			
<b>N</b>						val			_
•						ted	alue		tion
Ν				.age	<b>P</b>	ula	e v:		ciat
0			Poor	Aver	Goo	Calc	Tabl	Df	Asso
1.		Less than 25 year	0	2	0	12.72	7.82	3	
		26-35 years	9	15	0		r		
		36-45 years	22	8	0				nt
	_	More than 45	4	0	0				lica
	AGE	years							igni
2.		Male	35	18	0	11.094	3.84	1	ut s
	ER								car
		Female	0	7	0				lini
	GE								Sig
3.	Z	Primary	8	4	0	5.723	7.82	3	
	AL	Higher	15	6	0				
	ION. CAT	secondary							cant
	CAT)	Graduate	12	13	0	1			gnifi
	EDUC QUAI	Post-graduate	0	2	0				Not si
4.	AR EA	Urban	29	25	0	4.762	3.84	1	Sig nifi

		Rural	6	0	0				
5.	P	Parents	20	19	0	19.912	7.82	3	
	SHI	Spouse	14	0	0				
	ION	Siblings	0	6	0				int
	RELAT: WITH P	Friend	1	0	0				Significa

For Ageof the samples with the pre-test knowledge scores, the calculated value of chi square 12.720 was more than 7.82, the table value of chi square at the 3 degree of freedom and 0.05 level of significance. Therefore, Age has significant association with the knowledge of the samples.

For Gender of the samples with the pre-test knowledge scores, the calculated value of chi square 11.094 was more than 3.84, the table value of chi square at the 1 degree of freedom and 0.05 level of significance. Therefore, Gender has significant association with the knowledge of the samples.

For Education qualification of the samples with the pre-test knowledge scores, the calculated value of chi square 5.723 was less than 7.82, the table value of chi squareat the 3 degree of freedom and 0.05 level of significance. Therefore, not significant.

For years of Area of residence of the samples with the pre-test knowledge scores, the calculated value of chi square 4.762 was more than 3.84, the table value of chi square at the 1 degree of freedom and 0.05 level of significance. Therefore, Area of residence has significant association with the knowledge of the samples.

For Relationship with patient of the samples with the pre-test knowledge scores, the calculated value of chi square 19.912 was more than 7.82, the table value of chi square at the 3 degree of freedom and 0.05 level of significance. Therefore, Relationship with patient has significant association with the knowledge of the samples.

**Conclusion**: planned Teaching Programme regarding management of adverse effect of lithium drug was effective in improving knowledge about management of adverse effect of lithium drug among the care givers. The findings clearly indicate that there is a greater need of awareness regarding adverse effect of lithium and its management. **REFERENCES**:

## **BOOKS**:

1. Townsend C Mary, **"PSYCHIATRIC MENTAL HEALTH NURSING"**, 6<sup>th</sup> Edition, F.A Davis company publication.

2. Sreevani Rentala, K. R. (2019). Basics in **"NURSING RESEARCH AND BIOSTATICS"**, New Delhi: Jaypee Brothers Medical Publishers.

© 2023 JETIR July 2023, Volume 10, Issue 7						www.jetir.org (ISSN-2349-5162)			
3.	R.	Sreevani;	"A	GUIDE	ТО	MENTAL	HEALTH	AND	
PSY	CHIAT	RIC NURSING"	, 4 <sup>th</sup> Edition	, Jaypee Brothe	ers Publicati	ion, New Delhi.			

JOURNALS:

1. Dalby, M., Vitezic, M., et., al.(2022) Characterizing mood disorders in the AFFECT study: a large, longitudinal, and phenotypically rich genetic cohort in the US. Transl Psychiatry 12, 121.

2. Mohammadi M R, Alavi S, et., al.(2022) Prevalence and Socio-Demographic Factors of Bipolar Mood Disorders in Children and Adolescents: Identifying the Principal Predictors. Iranian Rehabilitation Journal; 20 (2):149-160.

3. Martin-Key NA, Olmert T, Barton-Owen G, et., al. (2021) The Delta Study – Prevalence and characteristics of mood disorders in 924 individuals with low mood: Results of the World Health Organization Composite International Diagnostic Interview (CIDI). Brain Behav.

4. Cha, S.; Kim, S. (2021) Comorbidity Patterns of Mood Disorders in Adult Inpatients: Applying Association Rule Mining. Healthcare, 9, 1155.

5. Abeldaño Zuñiga RA, Valencia E, et., al. (2020) Prevalence of Mood and Anxiety Disorders Among Adults Seeking Care in Primary Healthcare Centres in Cordoba, Argentina. Front. Psychiatry 11:232. Doi: 10.3389/fpsyt.2020.0023.

6. Dr.mahipal.S. (2016), Effectiveness of Teaching Plan on Knowledge, For Patients on Lithium Carbonate Therapy at Selected Psychiatric Centre of Jaipur City. Third international conference on multidisciplinary research & practice vol. 4 Issue 1. ISSN 2321-2705 page no.423.

Pawan .J. Khush .S. et.al. (2020) conducted a evaluate the effectiveness of structured teaching programme on knowledge regarding Lithium toxicity among care givers at selected psychiatric settings, Udaipur. UIJIR | ISSN (O) – 2582-6417 Vol. 2 Issue 3. Page no.124.

8. Hashmat U., Muhammad Farid K. (2014) Mood Stabilizer Agent Lithium Carbonate Depletes Reduced Glutathione In Human Erythrocytes During Lithium Toxicities. Gomal journal of medical sciences Vol 12, no 4 (2014).

9. McKnight RF., Adida M., et., al. (2012) Lithium toxicity profile: a systematic review and meta-analysis. Lancet (London, England). 379(9817):721-728.

10. Saurabh K., Swarndeep S., et., al. (2020) Assessment of lithium-related knowledge and attitudes among patients with bipolar disorder on long-term lithium maintenance treatment. Indian Journal of Psychiatry: Vol (62) - Issue 5 - p 577-581 doi: 10.4103/psychiatry.IndianJPsychiatry\_339\_19.

## WEBSITES:

1. https://blogs.worldbank.org/health/mental-health-lessons-learned-2020-2021.

2. https://www.financialexpress.com/lifestyle/health/overcoming-the-taboo-of-mental-health-in-india-amidst-the-pandemic/2294235/.

3. https://pubmed.ncbi.nlm.nih.gov/17885571/.

4. https://en.wikipedia.org/wiki/Lithium\_(medication).

5. https://www.nami.org/mhstats.

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3997379/. 6.

7. https://www.ijph.in/article.asp?issn=0019557X;year=2020;volume=64;issue=4;spage=413;epage=416;aulas t=Gandhi.

Aarthi.R., (2017) a structured assessment on Lithium Knowledge among patients with Bipolar Disorder, 8. Coimbatore. Published in Medicine psychology .http://repository-tnmgrmu.ac.in/4837/1/201801217shree\_aarthi.pdf.

