An Insight on Patient's Knowledge, Attitude and Practice of their Psychiatric Illness: An Assessment on Pre and Post Mental Health Education

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ABSTRACT

Background: Patient information leaflets (PILs) are as decisive as pharmacotherapy interventions in managing all psychiatric disorders. PILs are globally accepted patient counselling aids to improve their knowledge about the disease and to encourage medication-taking behaviour. To design, validate the PILs and assess the pre and post-Mental Health Education (MHE) of patients with Depression, Bipolar affective disorder, Alcohol dependence Syndrome and Schizophrenia. **Materials and Methods:** This study was conducted in two phases. In Phase-I, the PILs were developed and validated with the help of healthcare and non-healthcare professionals. Quality information was assessed by using the Ensuring Quality Information for Patients (EQIP) questionnaire and PMOSE/IKIRSCH formula was used to measure the readability and complexity. In phase-II, the impact of pre and post MHE on knowledge, attitude and practice of PILs was evaluated. Chi-square test was performed to assess the difference between pre and post-MHE. **Results:** A total of 106 participants validated the PILs. The compatibility was low and proficiency level was level-2, which signifies understanding capability in people having high school as educational background. Majority (>90%) of the validator's response to the PILs were found to be acceptable. This study resulted in a significant improvement (*p*=0.001) on pre and post- MHE with respect to Knowledge Attitude and Practice questionnaire of Depression, Bipolar affective disorder, Alcohol dependence Syndrome and Schizophrenia respectively. **Conclusion:** It was found that PILs provided better understanding about the psychiatric disorder and encouraged to adhere to the medications.

Key words: Mental health education, KAP, Patient information leaflet, Psychiatric illness, Ambulatory patients.

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INTRODUCTION

In India psychiatric disorders are becoming one of the major public health issues with the prevalence of 4.7%.[1] Untreated psychiatric disorders cause disability, significant personal burden to patients and their families such as low quality of life, negative attitudes, deprivation, diminished productivity, suffering, physical health problems, and early death.[2-4] Despite the significant morbidity and mortality caused by mental illnesses, which are frequently associated with in low- and middle-income countries, there is a shortage of mental health professionals. This scarcity of mental healthcare professional resulted in poor patient-doctor relationship and the patients might tend to forget the information provided by them.[5-6]

In May 2013 the World Health Organization (WHO) Comprehensive Mental Health Action Plan 2013-2020 was endorsed by the 66th Global Health Assembly of Health Ministries by 194 member states and one of the strategies of WHO's mental health action plan was to the promote awareness and prevent of psychiatric disorder.[7] Hence this study was initiated with a primary strategy to promote the mental health education among the patients with psychiatric illness. In recent times, printed educational materials are preferable sources in educating patients with chronic conditions.[8] Also, studies suggested that written information can help patients retain most of the information.[9-12]

In India, limited organizations (government and non-government) provide PILs on a specific disease, which helps the patient understand their disease.[13] Validation of PILs is of the utmost importance that affects the patient directly.[14] However, there is minimal evidence about the validation and the quality of PILs. Moreover, in recent days the quality of PILs are much needed to educate about intensive care, minimal hospital stays and a step towards ambulatory care.[15]

The prime purpose of PILs are to educate and focus on improving the awareness on drug therapy, disease prevention strategies, pharmacological, non-pharmacological interventions. A study states that motivating patients and caretakers in changing their lifestyle has major impact on current mental health status of the patient can prevent further worsening.[16] Psychiatric patients are often prescribed with multiple pharmacotherapy approaches where patients need to be informed about their disorders and medications for improvement. Education on medicine and health often occurs during direct contact with patients, occasionally accompanied by appropriate readable information. However, there are other concerns about the success of ensuring relevant information to target communities.[17] This study was conducted to assess the knowledge, attitude and practice of patients with Depression, Bipolar affective disorder (BPAD), Alcohol dependence Syndrome (ADS) and Schizophrenia on pre and post metal health education.

MATERIALS AND METHODS

This study involved Quasi-experimental study design to estimate the effect of designed and validated patient information leaflets among patients with psychiatric disorders. The study was conducted between

November 2019 to March 2021 in two phases. Phase I consisted of development and validation of patient information leaflets for psychiatric disorders such as depression, BPAD, ADS and schizophrenia. In Phase II, assessed the knowledge, attitude and practices of PILs among patients with depression, bipolar affective disorder, alcohol dependence syndrome and schizophrenia. The study was approved by the Institutional Ethics Committee [JSSCPM/THEC/2019/014], JSS Medical College and Hospital, Mysore-570015, Karnataka. After the approval of ethics committee, the study was conducted under the joint initiative by the Department of Psychiatry and Department of Clinical Pharmacy in a south Indian tertiary care teaching hospital located in Mysuru. This initiative is also known as JSS Medication Information for Neuropsychiatric Disorder and Sensitization Initiative (JSS MINDS), where the average daily psychiatric outpatient visitors are 50.

Inclusion Criteria

- Patients who visited JSS MINDS.
- Age above 18 years of any gender.
- Recent diagnosed by the psychiatrist with depression, bipolar disorder, alcohol dependence syndrome and schizophrenia as per International Classification of Diseases-10 Classification.
- Patients who give the consent.

Exclusion Criteria

- Patients with other psychiatric comorbid condition.
- Patients with cognitive impairment.

Study Instrument
Ensuring Quality Information for Patients (EQIP)

EQIP consists of a 20-question checklist with four potential answers: "yes," "partially," "no," and "not applicable". This questionnaire was chosen to evaluate the quality information, because it applies to all types of written content, the EQIP tool was chosen for the quality evaluation in the PILs. The validated answers were given in percentage score. EQIP formula was used to calculate the percentage score for individual question:

[(Yes × 1) + (Partly × 0.5) + (No × 0) / 20 – Does not apply] × 100 = % score

PMOSE/IKIRSCH

The evaluator provided a score based on the three criteria: document structure, density and dependence, which has Complexity level (Very low to very high), proficiency levels (level-1to level-5) and grade or schooling, as required by the PMOSE/IKIRSCH evaluation. Based on response score, the quality was estimated as high and low, i.e., a high score indicates better quality and vise-versa. The results are then summarized and evaluated according to a predefined set of criteria: Level 1-score 3-5, extremely low, understanding level is for people who are in grades 4 to 8; Level 2-score 6-8, small complexity understanding level is for people who are in grades 8 to 12; Level 3-score 9-11, moderate complexity understanding level is for people who are in grades 12 and also who are in college); Level 4-score12-14, high complexity understanding level is for people who are in graduate college and Level 5-score 15-17, Very High and understanding level is for people who are in post-college degree postgraduate degree.[18]

Study Methodology (Figure 1)
Phase I
Development and Validation of PILs

Patient information leaflets were developed with the help of standard textbooks and appropriate recent studies in psychiatry. The PILs was
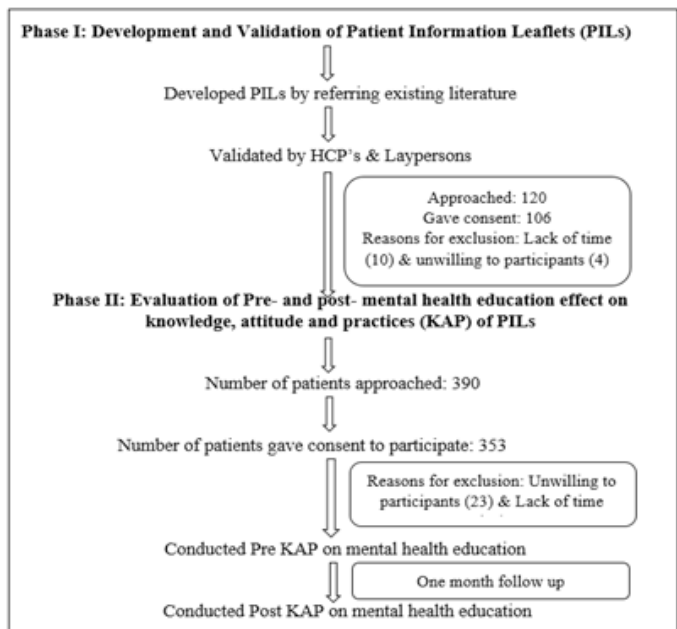

Figure 1: Flow diagram of the study phases.

translated to local language (Kannada) and back translated (English) with the help of linguistic expert. After getting the oral consent, the printed copy of both (Kannada and English) PILs, EQIP and PMOSE/IKIRSCH validation questionnaire were distributed among multidisciplinary professionals such as psychiatrist, psychiatry postgraduates, students of pharmacy, medical, Ayurveda, nursing staff, pharmacist, clinical psychologist, layperson and patient caretaker. The participants were asked to read the PILs and rate the score, and their responses were obtained. The data of response was recorded with the help of Microsoft Excel (version 2019) and the percentage score was obtained by applying the EQIP formula.

Phase II
Evaluation of Pre- and post- mental health education through PILs

Knowledge, Attitude and Practice structured questionnaire was developed on basis of previous research conducted to assess the KAP on mental health among the healthcare professionals.[19] Knowledge was assessed by 10-item questionnaire, Attitude and Practice were assessed by 4-item question respectively. The response for KAP "yes" scored as "1" and "No" as "0". All enrolled study patients were given a self-designed and validated KAP questionnaire at baseline (pre- mental health education) and at the one-month follow-up (post- mental health education).

Statistics

Descriptive analysis was performed for the categorical variables. For analyzing the pre and post mental health education chi square test was performed using SPSS Version 22. *p*-value <0.05 was considered as significant.

RESULTS

Phase I

A total of 106 participants provided oral consent for validating the PILs. The majority of the study participants were female (*n*=65, 61.3%) and in the age group between 20-30 years (*n*=88, 83.0%) with a mean age of 27.1 years. Among these 106 participants, majority of the participants were

Lay Person (*n*=31, 29.2%) followed by Patient Care Taker (*n*=23, 21.6%). Students with educational background such as Pharmacy (*n*=9, 8.4%), MBBS (*n*=8, 7.5%), Ayurveda students (*n*=4, 3.7%) and postgraduates in psychiatry (*n*=8, 7.5%) were part of this study. Other healthcare professionals such as psychiatrist (*n*=6, 5.6%) and staff nurse (*n*=6, 5.6%), clinical psychologist were part of validating the PILs. The details of validators demographics and educational background and their high response scores are presented in Figures 2 and 3.

A total of 61 (57.5%) participants scored more than 75% in EQIP validate response score. The Lay Persons give the highest score (*n*=17, 27.8%) followed by Patient Care Taker (*n*=14, 22.9%).

The PMOSE/IKIRSCH score for Compatibility and Proficiency was "7" which means the compatibility was "low", and the calculated proficiency level was "level-2" which explains the readily understanding for people with Grade 8 or high school degree as educational background.

One of the EQIP criteria, "respectful tone", received the highest score (99.5%). While other criteria's such as reader's space (75.5%), date of PILs produced (75.0%), details of other sources of information (73.0%), and mentioning of medication generic or brand names (72.0%), received the response between 70-80%. The criteria, "personally addressed the reader" (53.0%), received a score of less than 70% from the validators. Table 1 shows various responses of EQIP criteria on patient education material, and the findings show that eight of twenty EQIP criteria received a score of more than 90%.

Phase II

Of the 353 patients enrolled into the study, majority of patients were male (50.9%) and the predominant diagnosis in the study population was
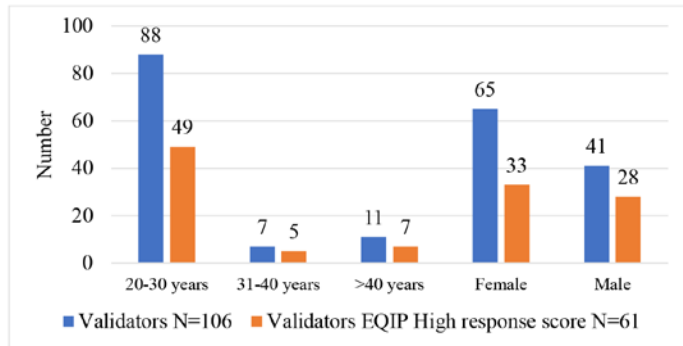

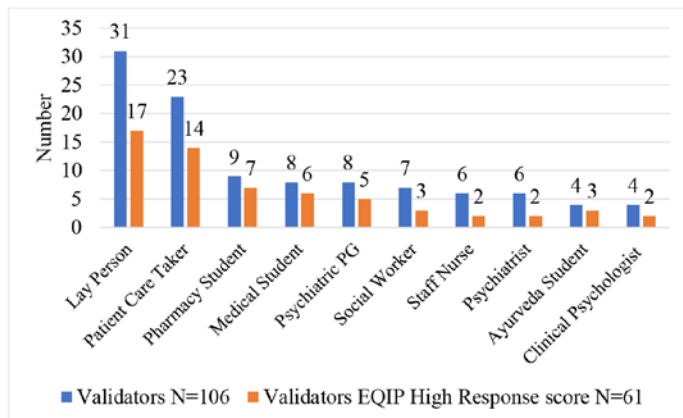**Figure 2:** Demographics of the validators.

Figure 3: Validator's background.

alcohol dependence syndrome (86.2%). During this period, psychiatric disorders was observed much in the age group of 18-38 years (58.3%) and the most prevalent (73.5%) psychiatric disorder among this age group was schizophrenia. Most of the patients were illiterate (32%) and unemployed (41.9%). Educational background of majority (34.4%) of the patients with alcohol dependence syndrome was PUC/Intermediate and the annual income (39.6%) was ≤3,907 INR. One fourth of the total population belonged to the upper middle class. Around sixty eight percent of the population were rural residents. The demographic distribution among the diagnostic categorization were presented in Table 2.

Knowledge

At pre-MHE patients did not know that the support from friends/family members would help in the treatment of psychiatric disorders at baseline, whereas Post MHE knowledge on 'support from friends/family members' increased from 60% to 96%. Nearly 79% of the patients were not aware that family history plays a major role in causing psychiatric

Table 1: Study participant's response on EQIP in percentage score.

Sl. No	Question	% Score
1	Does the document start by telling what it will cover and then what it says?	97.5
2	Does it use everyday language? Explaining unusual or medical words or abbreviations or jargon	87.5
3	Does it use short sentences short sentence of less than 15 words on average?	88.0
4	Does it personally address the reader?	53.0
5	Is the tone respectful?	99.5
6	Is the design and layout document satisfactory?	99.0
7	Does the contains easy to understand illustrations, diagrams or photos that are relevant to the subject it covers?	82.0
8	Is the information presented in a logical order?	98.5
9	Does the document have a named space for the reader to make notes?	75.5
10	Does the document Contain contact details for the health care services where the reader can receive the care or treatment for problems discussed in the document?	92.0
11	Does the document contain the date it was produced?	75.0
12	Does the document contain the name of the person or department that produced it?	98.5
13	Does the document say whether patients and/or their families were involved or consulted in its production?	87.0
14	Does it use generic names for all medications or products instead of, or in addition to, brand names and does it designate brand names as such?	72.0
15	Does the document quality of life issues, like school attendance or reduced mobility?	80.5
16	Does the document contain details of other sources of information for the reader?	73.0
17	Is the purpose described?	94.0
18	Are the benefits described?	99.0
19	Are the risks and side effects described?	89.5
20	Are any alternatives described?	87.0

disorders at pre mental health education while at post mental health education the awareness increased to 88% (Table 3).

Attitude and Practice

Attitude towards sleep and appetite pattern showed marked improvement at post-MHE (97%) when compared to the pre-MHE (9%). The practice on intake of over-the-counter medication has drastically decreased to 22% at post-MHE. Improvement was seen in post mental health education on attitude towards adverse drug reaction and in the practice of following the routine daily activity (Table 3). Overall, when compared with the KAP responses of patients there is an improvement in the mental health education in the after post assessment when compared with pre assessment.

Table 2: Demographics of patients with psychiatric disorders.

		Depression n=133 (%)	BPAD n=109 (%)	ADS n=58 (%)	Schizophrenia n=53 (%)	Total n=353 (%)
Gender	Male	59 (44.36)	44 (40.36)	50 (86.2)	27 (50.94)	180 (50.99)
	Female	74 (55.63)	65 (59.63)	8 (13.79)	26 (49.05)	173 (49)
Age:	18-38 Years	75 (56.39)	57 (52.29)	35 (60.34)	39 (73.58)	206 (58.35)
	39-59 Years	43 (32.33)	39 (35.77)	21 (36.2)	11 (20.75)	114 (32.29)
	>60 Years	15 (11.27)	13 (11.92)	2 (3.448)	3 (5.66)	33 (9.348)
BMI	< 16 Severe thinness	5 (3.759)	3 (2.752)	4 (6.896)	1 (1.886)	13 (3.682)
	16-17 Moderate Thinness	2 (1.503)	3 (2.752)	1 (1.724)	1 (1.886)	7 (1.983)
	17-18.5 Mild Thinness	3 (2.255)	5 (4.587)	3 (5.172)	2 (3.773)	13 (3.682)
	18.5-25 Normal	72 (54.13)	54 (49.54)	29 (50)	24 (45.28)	179 (50.7)
	overweight 25-30	33 (24.81)	32 (29.35)	15 (25.86)	18 (33.96)	98 (27.76)
	obese Class I 30-35	12 (9.022)	7 (6.422)	3 (5.172)	4 (7.547)	26 (7.365)
	35-40 Obese Class II	4 (3.007)	5 (4.587)	3 (5.172)	2 (3.773)	14 (3.966)
	>40 Obese class	1 (0.751)	0 (0)	0 (0)	1 (1.886)	2 (0.566)
Education	Professional	21 (15.78)	17 (15.59)	6 (10.34)	9 (16.98)	53 (15.01)
	Graduate	16 (12.03)	18 (16.51)	7 (12.06)	7 (13.2)	48 (13.59)
	PUC/diploma	8 (6.015)	6 (5.504)	20 (34.48)	5 (9.433)	39 (11.04)
	High School	17 (12.78)	12 (11)	5 (8.62)	6 (11.32)	40 (11.33)
	Middle school	9 (6.766)	7 (6.422)	3 (5.172)	2 (3.773)	21 (5.949)
	Primary school	15 (11.27)	12 (11)	9 (15.51)	3 (5.66)	39 (11.04)
	illiterate	47 (35.33)	37 (33.94)	8 (13.79)	21 (39.62)	113 (32.01)
Occupation	Agriculture and Fishery	22 (16.54)	17 (15.59)	8 (13.79)	8 (15.09)	55 (15.58)
	Clerks	0 (0)	4 (3.66)	0 (0)	1 (1.88)	5 (1.416)
	Craft and trade	5 (3.759)	2 (1.834)	2 (3.448)	3 (5.66)	12 (3.399)
	Elementary occupation	2 (1.503)	3 (2.752)	1 (1.724)	2 (3.773)	8 (2.266)
	Plant and machine operators	8 (6.015)	6 (5.504)	3 (5.172)	7 (13.2)	24 (6.798)
	Professional	18 (13.53)	16 (14.67)	3 (5.172)	7 (13.2)	44 (12.46)
	Semi-professional	9 (6.766)	8 (7.339)	4 (6.896)	6 (11.32)	27 (7.648)
	Skilled worker	10 (7.518)	10 (9.174)	6 (10.34)	4 (7.547)	30 (8.498)
	Unemployed	59 (44.36)	43 (39.44)	31 (53.44)	15 (28.3)	148 (41.92)
Income	≤3,907	45 (33.83)	28 (25.68)	23 (39.65)	16 (30.18)	112 (31.72)
	3,908–11,707	7 (5.263)	9 (8.256)	10 (17.24)	11 (20.75)	37 (10.48)
	11,708–19,515	10 (7.518)	11 (10.09)	9 (15.51)	4 (7.547)	34 (9.631)
	19,516–29,199	15 (11.27)	14 (12.84)	6 (10.34)	3 (5.66)	38 (10.76)
	29,200 –39,032	21 (15.78)	19 (17.43)	1 (1.724)	1 (1.886)	42 (11.89)
	39,033–78,062	10 (7.518)	7 (6.422)	3 (5.172)	8 (15.09)	28 (7.932)
	≥78,063	25 (18.79)	21 (19.26)	6 (10.34)	10 (18.86)	62 (17.56)
Socio-Economic-Status	Upper (I)	17 (12.78)	25 (22.93)	3 (5.172)	7 (13.2)	52 (14.73)
	Upper Middle (II)	26 (19.54)	26 (23.85)	21 (36.2)	12 (22.64)	85 (24.07)
	Lower Middle (III)	19 (14.28)	20 (18.34)	5 (8.62)	10 (18.86)	54 (15.29)
	Upper Lower (IV)	42 (31.57)	23 (21.1)	11 (18.96)	15 (28.3)	91 (25.77)
	Lower (V)	29 (21.8)	15 (13.76)	18 (31.03)	9 (16.98)	71 (20.11)
Residency	Rural	87 (65.41)	76 (69.72)	40 (68.96)	37 (69.81)	240 (67.98)
	Urban	46 (34.58)	33 (30.27)	18 (31.03)	16 (30.18)	113 (32.01)
Comorbidities	Present	17 (12.78)	15 (13.76)	4 (6.896)	3 (5.66)	39 (11.04)
	Absent	115 (86.46)	94 (86.23)	54 (93.1)	50 (94.33)	313 (88.66)
Family history of psychiatric illness	Present	19 (14.28)	21 (19.26)	23 (39.65)	34 (64.15)	97 (27.47)
	Absent	113 (84.96)	88 (80.73)	35 (60.34)	19 (35.84)	255 (72.23)
Marital status	Unmarried	33 (24.81)	27 (24.77)	22 (37.93)	25 (47.16)	107 (30.31)
	Married	76 (57.14)	62 (56.88)	28 (48.27)	17 (32.07)	183 (51.84)
	Widow	11 (8.27)	12 (11)	5 (8.62)	3 (5.66)	31 (8.781)
	Separated	13 (9.774)	8 (7.339)	3 (5.172)	8 (15.09)	32 (9.065)

Table 3: Percentage distribution of pre and post-mental health education of knowledge, attitude and practice.

SI. No	Questionnaire	Pre- mental health education		Post- mental health education	
		Yes [N (%)]	No [N (%)]	Yes [N (%)]	No [N (%)]
	Knowledge				
1	Do you know about your psychiatric disorder?	100 (28.32)	253 (71.67)	334 (94.61)	19 (5.382)
2	Do you think family history play a role in causing psychiatric disorders?	72 (20.39)	281 (79.6)	314 (88.95)	39 (11.04)
3	Do you think marriage conflicts/unemployment/workload can increase the risk of psychiatric disorders	248 (70.25)	105 (29.74)	320 (90.65)	33 (9.348)
4	Do you think supernatural powers or God causes the psychiatric disorder?	150 (42.49)	203 (57.5)	315 (89.23)	38 (10.76)
5	Do you think family/friends support can help in the treatment of psychiatric disorders?	144 (40.79)	209 (59.2)	341 (96.6)	14 (3.966)
6	Do you think psychiatric patients will have a positive outcome after the treatment?	40 (11.33)	313 (88.66)	294 (83.28)	59 (16.71)
7	Do you think an evil eye or evil spirit causes the psychiatric disorder?	202 (57.22)	151 (42.77)	326 (92.35)	27 (7.648)
8	Do you think talking about the psychiatric illness is good for mental health?	20 (5.66)	333 (94.33)	275 (77.9)	78 (22.09)
9	Do you think consuming medications is important for the management psychiatric disorder?	131 (37.11)	222 (62.88)	269 (76.2)	84 (23.79)
10	Do you think medications used to treat psychiatric disorders can increase the risk of addiction and worsen the symptoms?	256 (72.52)	97 (27.47)	34 (9.631)	319 (90.36)
	Attitude				
1	Are you adherent to your psychiatric medications?	73 (20.67)	280 (79.32)	321 (90.93)	32 (9.065)
2	Are you following the activities informed by your psychiatrist?	137 (38.81)	216 (61.18)	341 (96.6)	12 (3.399)
3	Are you aware of possible adverse reactions of your psychiatric medications?	59 (16.71)	294 (83.28)	326 (92.35)	27 (7.648)
4	Do you follow regular sleep and appetite partner as advised by your psychiatrist?	33 (9.34)	320 (90.65)	345 (97.73)	8 (2.266)
	Practice				
1	Do you miss taking the doses of your psychiatric medications?	189 (53.54)	164 (46.45)	294 (83.28)	59 (16.71)
2	Have you followed the regular activities advised by the psychiatrist?	125 (35.41)	228 (64.58)	320 (90.65)	33 (9.348)
3	Have you informed psychiatrist about any new symptoms that experienced in the past month?	80 (22.66)	273 (77.33)	262 (74.22)	91 (25.77)
4	Did you take any Over-The-Counter medications?	215 (60.9)	138 (39.09)	79 (22.37)	274 (77.62)

A statistical analysis was performed on the changes in the mean KAP values of pre and post-MHE. The KAP scores at post MHE improved significantly after counseling as compared to the pre MHE (*p*=0.0001). The knowledge, attitude, practice levels of patients mean score had been (3.861±1.373; 1.178±1.019; 1.722±0.966) improved by the following (7.988±0.999; 3.776±0.462; 2.705±0.713) and has statistically significance compared to pre and post MHE. Between the pre and post MHE, the statistical significance was seen among the patients with depression (*p*=0.000), BPAD (*p*=0.002), ADS (*p*=0.003) and schizophrenia (*p*=0.000). Table 4 presents the Sociodemographic factors associated with Pre and Post Mental Health Education

DISCUSSION

First and foremost, the parts of the PILs should be organized according to the users' most pressing demands. Patients' expectations of where to find information in the PIL and where they look for information in the PIL would be aligned in safe and effective use of a prescription. Patients anticipate to discover the information on drugs, effect of over-the-counter medicine, in the leaflet.[20-21] In India, studies on the development and validation of PILs of psychiatric disorders are very minimal. Sometimes verbal information is insufficient which might result in needless rescheduling the visit with the respective consultant. A recent interventional study has proved that the PILs are an efficient method of communicating perioperative instructions to patients, which not only improves patient satisfaction but also reduces rescheduling the visit.[22] Therefore, considering the importance of PILs, this study designed for developing PILs for patients with psychiatric illness.

To the best of our knowledge, this is the first study conducted in India to develop and validate the PILs on common psychiatric illness such as depression, bipolar affective disorder, alcohol dependency syndrome

and schizophrenia. PILs are an integral aspect of health care which plays a vital role in managing the disease. Therefore, they must be evaluated to guarantee their accuracy from different healthcare professionals to ensure the quality information before dissemination to patients.[23] In this study, validators of PILs are psychiatrist, psychiatry PGs (postgraduate), psychiatry social workers, clinical psychologist, patient caretaker, layperson, and students of pharmacy, medical, and Ayurveda which enable us to build a most informative PILs that helped patients in improving their knowledge.

The quality of PILs is often measured by population who can read and understand. Literacy and the degree of individual understanding are essential factors in the creation of an information leaflet.[24] A good reading level of the leaflet indicates the information is well-written and available in the user's language.[25] The PILs validated in this study has the readability score level-2. Which indicates people who have a high school degree can able to understand the PILs. This is supported by the recent literacy rates in India where around 77% of people aged 15 and above can read and understand the simple statement.[26]

The EQIP questionnaire was used to analyze the level of acceptance of PILs. It was found that the validators accepted by scoring more than 90% for eight parameters (respectful tone, satisfactory in the document content, logical order, design, layout, benefit, purpose, name and details of the department) out of twenty. Six parameters such as medical words (terminologies), risk and side effects, alternatives, involvement of patients and their families were scored between 80-90% by the validators. The EQIP criteria on personally addressing the readers were scored 53%, nearly similar results were observed (50%) in a study on the development and validation of patient information leaflet for HIV patients.[15]

It was found that the majority of the EQIP criteria were met during the preparation of the patient knowledge leaflet. However, some of the less

Table 4: Sociodemographic factors associated with Pre and Post Mental Health Education.

Hypothesis	Parameters	Mental Health Education	KAP-Response	Mean	SD	T-test	P-value
1	Overall KAP	Pre- MHE	Yes	14.470	1.210	61.485	0.000
		Post-MHE	Yes	6.762	2.410		
2	Educational background and MHE	Pre- MHE	yes	3.144	3.511	16.826	0.518
		Post-MHE	yes	7.620	3.152	45.410	0.000
		Pre-MHE	No	10.852	2.657	76.721	0.000
		Post-MHE	No	0.087	2.551	00.647	0.000
3	Knowledge and MHE	Pre- MHE	yes	3.861	1.373	-55.907	0.000
		Post-MHE	yes	7.988	0.999		0.000
		Pre-MHE	No	6.138	1.373	55.907	0.000
		Post-MHE	No	2.011	0.999		0.000
4	Attitude and MHE	Pre- MHE	yes	1.178	1.019	-45.735	0.000
		Post-MHE	yes	3.776	0.462		0.000
		Pre-MHE	No	2.821	1.019	45.735	0.000
		Post-MHE	No	0.223	0.462		0.000
5	Practice and MHE	Pre- MHE	yes	1.722	0.966	-15.226	0.000
		Post-MHE	yes	2.705	0.713		0.000
		Pre-MHE	No	2.277	0.966	15.226	0.000
		Post-MHE	No	1.294	0.713		0.000
6	Depression	Pre and Post-MHE	yes	-7.233	2.292	-36.385	0.000
		Pre and Post-MHE	No	7.233	2.292	36.385	0.000
7	BPAD	Pre and Post-MHE	yes	-8.128	2.265	-37.463	0.002
		Pre and Post-MHE	No	8.128	2.265	37.463	0.002
8	ADS	Pre and Post-MHE	yes	-8.137	2.274	-27.248	0.003
		Pre and Post-MHE	No	8.137	2.274	27.248	0.003
9	Schizophrenia	Pre and Post-MHE	yes	-7.566	2.590	-21.261	0.000
		Pre and Post-MHE	No	7.566	2.590	21.261	0.000

*__MHE:__ Mental Health Education; K**AP:** Knowledge Attitude and Practice; **BPAD:** Bipolar Affective Disorder; **ADS:** Alcohol Dependence Syndrome.

scored EQIP parameters such as such as contact details, date produced, date produced, space for readers notes, personally address the reader were revised as per the evaluator's comments. Religion plays a major role, with specific emphasis on ideas about sin and the origins and treatment of mental illness. Stigma towards psychiatric disorder was connected with the idea that the evil eye, sorcery, and God's retribution could cause mental disease.[27] Indeed, in this study, patients' knowledge about the God's Will (42%) and evil eye or evil spirt (57%) in the causes the psychiatric disorder was found lower when assessed during the pre-KAP. In addition, recent study studies showed mixed responses on patient's knowledge and attitude towards psychiatric illness. People with a greater degree of knowledge have had more opportunities to be educated on the area and, as a result, are more understanding and have better attitudes. Other studies have found that having a greater understanding of mental illness has caused individuals to be more aware of their actual symptoms and behaviors.[27-29] In this study, the association between knowledge and attitude shows the similar result.

According to the findings, the efficiency of psychiatric training and education is critical for the success of patient's better health care. Post-mental health education KAP scores increased substantially (*p*=0.0001) following patient counseling, with indicates significant improvements in all the three aspects of the analysis, namely knowledge (*p*=0.0001) attitude (*p*=0.0001), and practice (*p*=0.0001). This study's findings are consistent with other research conducted on psychiatric patients at different regions.[29-30]

Our study observed that many patients were ready to wait patiently for their time to attend the counseling sessions. This reflects psychiatric patients urge towards attaining knowledge about their disorder. Patients persuaded the value of this service, which accomplished the trust and professional connection which led the patients in discussing the either improvements or worsen symptoms comfortable. This rapport encouraged patients to engage persistently in such counseling programs further.

CONCLUSION

Patient information leaflets developed for patients with psychiatric illness are helpful and should be used as sources for patient information to provide guidance and counselling. However, it should be updated periodically, taking into account the most recent literature.

ACKNOWLEDGEMENT

their busy schedule. Also, we would like to thank JSS Hospital, staff of the Department of Psychiatry and clinical psychology, to conduct this study.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

Strengths and Limitations

This is the first study conducted in India to develop and validate patient information leaflets for psychiatric disorders. Also, we believe that the feedback provided by multidisciplinary healthcare professionals who involved in this study enabled to develop robust patient information leaflets through which patients were able to understand the disease and their medications. This was a single center study, which may affect the generalizability of the findings.

ABBREVIATIONS

PIL: Patient Information Leaflet; **WHO:** World Health Organization; **BPAD:** Bipolar Affective Disorder; **ADS:** Alcohol Dependence Syndrome; **EQIP:** Ensuring Quality Information for Patients; **KAP:** Knowledge Attitude and Practice; **MHE:** Mental Health Education.

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