Original Article

Medication Adherence to Psychotropic Drugs among Patient Attending OPD of Teaching Hospital Chitwan Medical College Teaching Hospital, Nepal

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Abstract: Mental disorders constitute a serious public health problem, mental disorders pose a major problem with regard to adherence to medication and are influenced by various factors. This study aimed to investigate the level of medication adherence to psychotropic drugs and the association between selected factors among mentally ill clients in psychiatric OPD of CMCTH, Chitwan, who were under medication for at least two months or more. A sample of N=155 clients was selected using a non-probability convenient sampling technique. Data were collected by using a structured interview schedule, and medication adherence was categorized into three levels. Data were analyzed by using descriptive (frequency, percentage, median and interquartile range) and inferential statistics (Chi-square). The study result revealed that only 26.5% of clients had high medication adherence. A statistically significant relationship was found between medication adherence and selected variables such as the residence of the client, duration of illness, follow-up visit on the right date, dropout when felt better, the effectiveness of drugs, perceived stigma due to mental illness, stress and traditional health-seeking behavior. In deduction, about one-fourth of clients had high medication adherence in this study. Factors associated with medication adherence were diverse and complex. In light of this, health workers should focus on factors affecting adherence while treating or caring the clients to achieve high adherence. Ultimately, high adherence to medication decreases the risk of psychiatric morbidity and mortality.

Keywords: medication adherence, clients, psychotropic drugs

1. INTRODUCTION

Health is more than the absence of disease; there is no health without mental health. Mental health is the ability of individuals to form harmonious relationships with others and able to contribute to the community [1]. It is a state of complete mental wellbeing, including social, spiritual, cognitive and emotional aspects [2]. Mental health is a state of wellbeing in which every individual realizes his or her potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to her community [3]. When an individual fails to maintain mental health as changes in emotion and thinking, it is called a mental illness [4]. Mental illnesses are health conditions involving changes in emotion, thinking or behaviour (or a combination of these [5]. Mental illnesses are associated with distress and problems functioning in social, work or family activities. Mental illness is a disorder of cognition (thinking) and

emotions (mood) as defined by standard diagnostic systems such as the ICD 10 and DSM [6]. Globally, psychiatric disorders have been a public health challenge and attributed to 14% of the global burden of diseases. One in four people in the world will be affected by mental or neurological disorders at some point in their lives [7]. Around 450 million people currently suffer from such conditions, placing mental disorders among the leading causes of ill health and disability worldwide [8]. Nearly two-thirds of people with a known mental disorder never seek help from a health professional due to various factors like stigma, discrimination and lack of knowledge, although treatment is available [9]. Even though treatment is available, half of those who seek medical assistance do not comply with the treatment properly [10]. Medication adherence refers to the degree or extent of conformity or compliance to the recommendations about day-to-day treatment by the provider with respect to the timing, dosage, and frequency. It may be defined as "the extent to which a patient acts in accordance with the prescribed interval and dose of a dosing regimen [11]. The phenomenon of adherence constitutes an important challenge for mental health professionals since nonadherence to treatment can result in an increase in the frequency and intensity of the crises, in the number of hospitalizations/readmissions, and thereby burden to the health system [12]. Moreover, nonadherence is related to an increase in care demands in emergency services, an increase in suicide rates, a worsening of the prognosis and impairment in the quality of life of patients with mental disorders [13]. Nonadherence to medication therapy is characterized by the divergence between the medical prescription and the Patient's behavior [14]. It is a serious problem in psychiatric treatment and compromises effectiveness. Noncompliance has been found to be more prevalent in chronic disorders [15]. The main reasons for noncompliance are lack of knowledge about illness, low socio-economic status, poverty, unemployment, side effects and no improvement of symptoms [16], which can negatively effect on mental health of both the Patient and the family members financially and socially [16]. The study on Factors affecting compliance with psychotropic drugs for psychiatric patients revealed that poor compliance with psychotropic drug regimens is a major obstacle to the effective care of persons who have a chronic mental illness. Seventy-one per cent of studied patients are non-compliant with psychotropic drugs, and the major factors affecting compliance with psychotropic drugs and leading to non-compliance are feeling better (45.0%), followed by the high cost of drugs (25.0%), forgetfulness and fear of drugs side-effect (24.2% & 23.3%) respectively [17]. Thus, a Patient's adherence to treatment is an important factor influencing the successful maintenance of treatment and the prevention of relapse [18]. On the basis of the literature review and clinical experiences, it can be concluded that medication compliance has a vital role in the recovery process [19]. The number of relapses and readmissions of psychiatric patients is increasing day by day because of inadequate assessment of the hindering factor [20]. Therapeutic goals cannot be achieved without compliance with medication, resulting in relapse and poorer outcomes [21]. Noncompliance is a significant problem and a major challenge for the healthcare team. Motivation and behavioral tailoring are essential practical factors expected by healthcare teams [22].

2. MATERIALS & METHODS

A descriptive cross-sectional research design was used for this study to find out the medication adherence to psychotropic drugs among clients attending OPD at Teaching Hospital, CMCTH. The study was conducted in Chit Wan Medical College Teaching Hospital, Bhagalpur, Chit Wan. A self-constructed structured checklist and interview schedule were developed to find out medication adherence and its related factors. The research instrument consisted of three parts, i.e. information on socio-demographic data, a questionnaire related to associated factors of medication adherence, self-constructed checklist for medication adherence. An appropriate form was developed to collect the data from medical files and interviews with

the respondents after an extensive literature review. All the collected data were verified by cross-checking with the caretaker and checked for completeness, consistency and accuracy. Data were organized, coded and entered in the SPSS, data were analyzed by using descriptive statistics (frequency, percentage, and average) and inferential statistics (Chi square) analysis according to the nature of the data. Analyzed data were presented in tables and interpreted accordingly.

3. RESULTS & DISCUSSION

3.1 Socio-demographic characteristics of the respondents

All collected data were analyzed and interpreted on the basis of the objectives of the study. Data were obtained from 155 respondents by non-probability convenient sampling technique from Chitwan Medical College, Bharatpur, Chitwan. The findings were analyzed and summarized using descriptive and inferential statistics and presented in tables as follows.

Table 01: Socio-demographic characteristics of respondents presented in tables as follows.

Variables	Frequency	Percentage
Age in years		
< 40	82	52.9
≥40 to < 60	65	41.9
≥60	8	5.2
Median= 37, IQR= $Q_3 - Q_1$ = 46 -28, Min=18, Max=82		
Sex of respondents		
Male	60	38.7
Female	95	61.3
Address		
Rural	91	58.7
Urban	64	41.3
Ethnicity		
Brahman/Chhetri	92	59.4
Dalit	38	25.5
Other*	25	16.1
Religion		
Hindu	19	76.8
Non-Hindu*[1]	36	23.2
Type of family		
Joint	67	43.2
Nuclear	88	56.8
Marital status		
Unmarried	34	21.9
Married	110	71.0
Other*[2]	11	7.1
Residence		
Own home	135	87.1
Other*[3]	20	12.9

Educational status		
Illiterate	13	8.4
Basic	59	38.1
Secondary and above	83	53.5
Occupational status before diagnosis		
Employed*	97	62.6
Unemployed	58	37.4
Occupational status after diagnosis		
Employed*	83	53.5
Unemployed	72	46.5
Family income per year		
Adequate	90	58.1
In-adequate	32	20.6
Surplus	33	21.3

Table 01 shows the socio-demographic information of respondents, the majority (52.9%) of the clients were under the age of 40 years, and the median age was 37 years. Most of the respondents (61.3%) were female. More than half (58.7%) of respondents were from rural areas, and the majority (41.9%) were of Brahman Chhetri ethnicity. Most of the (76.8%) of respondents followed Hindu religion. The majority of respondents (56.1%) were from dual families, and more than 2/3rd (71%) were married. Almost (87.1%) of respondents lived in their own homes, and more than half of them (53.5%) had secondary and above-level education. The majority of respondents (62.6 %) were employees before they were clinically diagnosed as mentally ill, and more than half (53.5) were still engaging in some money-generating work. About 58.1% of respondent's families had adequate annual income to bear the expenditure for their family.

Table 02: Illness-Related Variables among Clients

Variables	Number	Percentage
Diagnosis of the respondents		
Schizophrenia	12	7.7
BPAD	32	20.6
Depression	32	20.6
Anxiety	31	20.1
Other *	48	31.0
Insight of illness		
Present	135	87.1
Absent	20	12.9
Duration of illness		
< 1 year	42	27.1
1 year to 5 year	70	45.2
> 5 year	43	27.7
Number of medicines taken per day		
≤2 tablets	81	52.3
>2 tablets	74	47.7

Experience of relapse		
Yes	75	48.4
No	80	51.6
Follow up on the right date		
Yes	89	57.4
No	66	42.6
Reason for follow-up		
Due to the effect of the drug	78	50.3
For regular visit	77	49.7
Co-morbidities		
Yes*	29	18.7
No	126	81.3
Having sensory problem		
Yes (hearing, visual)	14	9.0
No	141	91.0
Having Mental retardation		
Yes	12	7.7
No	143	92.3

Table 02 illustrates that the number of clients with a diagnosis of BPAD, Depression, and Anxiety was nearly similar as around of 20%. Most of them (87.1%) had an insight into their illness, and about 45.2% of them had been taking medication for the last 1 to 5 years. More than half (52.3%) of clients were taking up to 2 types of medicines per day, and 48.4% of them had experienced at least one one-time relapse since treatment. The majority (57.4%) of the respondents attended their follow-up visit on the right date, and the reason for follow-up (50.3%) was due to the effect of the drugs. Only 18.7% of clients had co-morbidities, as well a few of them, 9.0% and 7.7%of clients, had sensory and mental retardation problems, respectively.

Table 03: Status of Healthcare Facilities among Clients.

Variable	Yes	No
	No (%)	No (%)
Dropout medicine when it feels better	65(41.9)	90(58.1)
Dropout medicine when it feels worse	11(7.1)	144(92.9)
Presence of severe side effect	8(5.2)	147(94.8)
Drug missing due to travelling	40(25.8)	115(74.2)
Drug missing due to addiction	9(5.8)	146(94.2)
Frequently changing drug	13(8.4)	142(91.6)
Misrecognition of drugs	7(4.5)	148(95.5)
The activity of daily living disturbance (ADL)	75(48.4)	80(51.6)
Fear of addiction to drugs	68(43.9)	87(56.1)
Distance of psychiatric health facilities within 40 km. (Median distance =39.8, min.=1 km. max.=122km.)	144(92.9)	11(7.1)
Accessibility of drug	115(74.2)	40(25.8)

Affordability of drugs	96(61.9)	59(38.1)
Having health insurance	63(40.6)	92(59.4)
Information related to drugs	135(87.1)	20(12.9)
Friendly behaviour of health worker	129(83.2)	26(16.8)
Waiting > ½ an hour for treatment	28(18.1)	127(81.9)

Table 3 shows that the majority (58.1%) of the clients said that they continued their medicine when they felt better, and 92.9% of clients did not stop their medicine when they felt worse. Almost (94.8%) of respondents had no severe side effects, and 74.2% of them took medication without missing out when travelling. Drug missing due to addiction was as low as 5.8%. Most of the 91.6% of respondents had had the same medication, and they (95.5%) had no confusion about the medicine. The majority (51.6%) had no disturbance in their daily life because of drugs, and a nearly similar (56.1%) number of clients had no fear of addiction to drugs. Similarly, most of the (92.9%) clients had health facilities within 40 km of distance and had easy access (74.2%) for needed medicine. The cost of the drugs is affordable for 61.9% of clients, and 59.4% of clients have no health insurance. Information provided by a health worker and their behavior toward clients was positive at 87.1% and 83.2%, respectively. Most of the clients (81.95) said that they did not need to wait for more than half an hour to have OPD service.

Table 04: Status of Support and Belief among Clients

Variable	Yes	No
	No (%)	No (%)
Family support for medication	129(83.2)	26(16.8)
Conflict within family	21(13.5)	134(86.5)
Stress felt by the client now	42(27.1)	113 (72.9)
Having social support	3(1.9)	152(98.1)
Felt stigma due to illness	24(15.5)	131(84.5)
Traditional health-seeking habit	49(31.6)	106(68.4)
Felt the importance of drugs for recovery	145(93.5)	10(6.5)
Felt the effectiveness of the drug for recovery	140(93.3)	15(9.7)
Felt alteration in cognitive function	96(61.9)	59(38.1)

Table 04 shows that the majority of 83.2% of clients had family support for medication and had no conflict (86.5%) within the family. Only 27.1% of clients were facing stress now, and almost none (98.1%) had any financial or other support from society. The majority of clients (84.55) did not feel stigma due to psychiatric illness, and only 31.6% of clients sought assistance from traditional healers during medication time. Most of them (93.5%) felt that medicine is important for them, and similarly (90.3%) felt that the drug is working well for them. Nearly 2/3rd (61.9%) of client felt that the drug was interfering with their cognitive function.

Table 05: Medication Adherence Response among Clients

Variable	Correct No (%)
I take all prescribed medicine	148(95.5)
I take medicine only at the prescribed time	115(74.2)
I do not take more doses of medicine than prescribed	132(85.2)
I do not take less dose of medicine than prescribed	138(89.0)
I do not stop my medication myself	88(56.8)
I do not change the medicine by myself	151(97.4)
I do not take any extra medicine without consulting my doctor	148(95.5)
I do not forget to take my medication	104(67.1)

Table 5 shows the variable used to assess medication adherence. It contains eight items that help identify the practice of adherence that clients adopted. Among the eight items, the maximum correct response of clients (97.4%) was that they do not change their medication by themselves, and the least correct response of clients (56.8%) was that they do not stop medication by themselves.

Table 06: Level of Medication Adherence among Clients

Level of adherence	Number	Percentage
High adherence	41	26.5
Average adherence	84	54.1
Low adherence	30	19.4

Table 6 shows that the majority of respondents (54.2%) had an average level of medication adherence, followed by 26.5% of high adherence to the psychotropic drug.

Table 07: Association between Level of Medication Adherence and Socio-demographic Characteristics among Clients

Variables	Level of medication adherence			$\chi 2$	p-value
	High No (%)	Average No (%)	Low No (%)		

Age in year					
< 40	23(56.1)	43(51.2)	16(53.9)	NA	
≥40 to < 60	16(39.0)	35(41.7)	14(46.1)		
≥60	2(4.9)	6(7.1)	0(0.0)		
Sex					
Male	15(36.6)	33(39.3)	12(40.0)	.111	.946
Female	26(63.4)	51(60.7)	18(60.0)		
Address					
Rural	23(56.1)	50(59.5)	18(60.0)	.159	.924
Urban	18(43.9)	34(40.5)	12(40.0)		
Ethnicity					
Brahman/Chhetri	28(68.3)	50(59.5)	14(46.7)	4.525	.340
Dalit	6(14.6)	22(26.2)	10(33.3)		
Other	7(17.1)	12(14.3)	6(20.0)		
Religion					
Hindu	36(87.8)	64(76.2)	19((63.3)	5.853	.054
Non-Hindu	5(12.2)	20(23.8)	11(36.7)		
Type of family					
Joint	23(56.1)	47(56.0)	18(60.0)	.158	.924
Nuclear	18(43.9)	37(44.0)	12(40)		
Marital status					
Unmarried	10(24.4)	16(19.0)	8(26.7)	NA	
Married	31(75.6)	62(73.9)	17(56.6)		
Other	0(0.0)	6(7.1)	5(17.7)		
Residence					
Own home	40(97.6)	73(86.9)	22(73.3)	9.054	.011
Other	1(2.4)	11(13.1)	8(26.7)		
Educational status					
Illiterate	2(4.9)	9(10.7)	2(6.6)	2.435	.656
Basic	15(36.6)	30(35.7)	14(46.7)		
Secondary and above	24(58.5)	45(53.6)	14(46.7)		
Occupational status before diagnosis					
Employed	21(51.2)	52(52.6)	18(18.8)	.289	.865
unemployed	14(48.8)	32(31.4)	12(11.2)		
Occupational status after diagnosis					
Employed	17(41.4)	48(57.1)	18(60)	3.345	.188
Unemployed	24(58.6)	36(42.9)	12(40)		
Family income /year					
Adequate	19(46.3)	53(63.1)	18(60.0)	5.821	.213
Inadequate	8(19.5)	17(20.2)	7(23.3)		
Surplus	14(34.2)	14(16.7)	5(16.7)		

Significance level at 0.05

Table 07 shows the association between level medication adherence level and socio-demographic characteristics, revealing that statistically significant association between residence and level medication level, with a *p*=.011.

Table 08: Association between Level of Medication Adherence and Illness-Related Variables among Clients.

Variables	Level of medication adherence			χ^2	*p*-value
	High No. (%)	Average No. (%)	Low No. (%)		
Diagnosis					
Schizophrenia	0(0.0)	8(9.5)	4(13.4)	NA	
BPAD	9(22.0)	18(21.5)	5(16.7)		
Depression	8(19.5)	17(20.2)	7(23.3)		
Anxiety disorder	8(19.5)	16(19.0)	7(23.3)		
Other	16(39.0)	25(29.8)	7(23.3)		
Insight					
Present	36(87.8)	73(86.9)	26(86.7)	.026	.987
Absent	5(12.2)	11(13.1)	4(13.3)		
Duration of illness					
<1 year	17(41.5)	19(22.6)	6(20.0)	10.477	.033
1 year to 5 year	15(36.5)	36(42.9)	19(63.3)		
>5 year	9(22.0)	29(34.5)	5(16.7)		
Number of medicine/days					
≤2 tab	23(56.1)	38(45.2)	20(66.7)	4.398	.111
>2 tab	18(43.9)	46(54.8)	10(33.3)		
Experience of relapse					
Yes	16(39.0)	39(46.4)	20(66.7)	5.582	.061
No	25(61.0)	45(53.6)	10(33.3)		
Follow up on the right date					
Yes	32(78)	46(54.8)	11(36.7)	12.664	.002
No	9(22)	38(45.2)	19(63.3)		
Reason for follow-up					
Due to drug effect	13(31.7)	44(52.4)	21(70.0)	10.472	.005
Regular visit	28(68.3)	40(47.6)	9(30.0)		
Co-morbidities					
Yes	6(14.6)	16(19.0)	7(23.3)	4.061	.131
No	35(85.4)	68(81.0)	23(76.7)		
Sensory problems					
Yes	1(2.4)	11(13.1)	2(6.7)	4.694	.096
No	40(97.6)	73(86.9)	28(93.3)		
Mental retardation					
Yes	0(0.0)	9(10.7)	3(10.0)	NA	
No	41(37.8)	75(89.3)	27(90.0)		

Significance level at 0.05

Table 8 shows the association between the level of medication adherence and illness-related variables. It reveals that there was a statistically significant association between the level of medication adherence and some of the illness-related illness-related variables, such as the duration of illness (p=.033), follow-up on the right date (p =.002), and reason for follow-up (p =.005). Although there was no significant association between adherence and experience of relapse, the p-value was .061.

Table 09: Association between Level of Medication Adherence and Drug related Variables among Clients

Variables	Level of medication adherence			χ^2	p-value
	High No. (%)	Average No. (%)	Low No. (%)		
Dropout drug when you feel better					
Yes	2(4.9)	40(47.6)	23(76.7)	39.099	<0.001
No	39(95.1)	44(52.4)	7(23.3)		
Dropout drug when feeling worse					
Yes	0(0.0)	6(7.1)	5(16.7)	NA	
No	41(100)	78(92.9)	25(83.3)		
Severe side effect					
Yes	0(0.0)	6(7.1)	2(6.7)	NA	
No	41	78(92.9)	28(93.3)		
Drug missed due to travel					
Yes					
No	0(0.0)	25(29.8)	15(50.0)	NA	
Drug missed due to addiction	41(100)	59(70.2)	15(50.0)		
Yes					
No					
Misrecognition of drug	3(7.3)	7(8.3)	0(0.0)	NA	
Yes	38(92.7)	77(91.7)	30(100)		
No					
Living disturbance due to drug	2(4.9)	5(6.0)	0(0.0)		
Yes	39(95.1)	79(94.0)	30(100)	NA	
No					
Fear of drug addiction					
Yes	19(46.3)	40(47.6)	16(53.3)	.382	.826
No	22(53.7)	44(52.4)	14(46.7)		
	17(41.5)	37(44.0)	14(46.7)	.139	.908
	24(58.5)	47(56.0)	16(53.3)		

Significance level at 0.05

Table 9 shows the association between the level of medication adherence and drug-related variables. It revealed that there was a statistically significant association between the level of medication adherence only with dropout medication when they felt they were cured as p (<0.001).

Table10: Association between Level of Medication Adherence and Selected Variables among Clients.

Variables	Level of medication adherence			χ^2	*p*-value
	High No (%)	Average No (%)	Low No (%)		
Distance for health facilities					
Within 40 km					
More than 40 km	39(95.1)	75(89.3)	30(100.0)	NA	
Easy availability of the drug	2(4.9)	9(10.7)	0(0.0)		
Yes					
No	34(82.9)	60(71.4)	21(70.0)	2.244	.326
Affordability of drug	7(17.1)	24(28.6)	9(30.0)		
Yes					
No	27(65.9)	51(65.9)	18(60.0)	.368	.832
Health insurance	14(34.1)	33(45.1)	12(40.0)		
Yes					
No	16(39.0)	33(39.3)	14(46.7)	.560	.756
Information given	25(61.0)	51(60.7)	16(53.3)		
Yes					
No	35(85.4)	73(86.9)	27(90.0)	.337	.845
Friendliness of H. worker	6(14.6)	11(13.1)	3(10.0)		
Yes					
No	37(90.2)	68(81.0)	24(80.0)	1.981	.371
Waiting > ½ an hour	4(9.8)	16(19.0)	6(20.0)		
Yes					
No	11(26.8)	12(14.3)	5(16.7)	2.978	.226
	30(73.2)	72(85.7)	25(83.3)		
Family support for medication					
Yes					
No	37(90.2)	71(84.5)	21(75.0)	5.307	.070
Conflict within family	4(9.8)	13(14.5)	9(30.0)		
Yes					
No	3(7.3)	13(15.5)	5(16.7)	1.875	.392
Stress felt by the client now	38(92.7)	71(84.5)	25(83.3)		
Yes					
No	6(14.6)	21(25.0)	15(50.0)	11.377	.003
Having social support	35(85.4)	63(75.0)	15(50.0)		
Yes					
No	0(0.0)	2(2.4)	1(3.3)	NA	
Felt stigma due to illness	41(100.0)16	82(97.6)	29(96.7)		
Yes					
No	3(7.3)	11(13.1)	10(33.3)	9.760	.008
	38(92.7)	73(86.9)	20(66.7)		

Significance level at 0.05

Table 10 shows the association between medication adherence level and selected related variables. It revealed that there was no statistically significant association between medication adherence level and healthcare-related variables, but it was associated with social support-related variables. The client with stress now (p=.003) and felt stigma because of mental illness (p=.008) had a significant association with medication adherence.

Table 11: Association between Level of Medication Adherence and Belief-related Variables among Clients.

Variables	Level of medication adherence			χ^2	p-value
	High No (%)	Average No (%)	Low No (%)		
Traditional health-seeking habit					
Yes	6(14.6)	27(32.1)	16(53.3)	12.025	.002
No	35(85.4)	57(67.9)	14(46.7)		
Felt the importance of the drug					
Yes	36(87.8)	82(97.6)	27(90.0)	5.137	.075
No	5(12.2)	2(2.4)	3(10.0)		
Felt Effectiveness of drug					
Yes	38(92.7)	79(94.0)	23(76.7)	7.995	.027€-
No	3(7.3)	5(6.0)	7(23.3)		
Felt alteration in cognitive function					
Yes	23(56.1)	53(63.1)	20(66.7)	.925	.630
No	18(43.9)	31(36.9)	10(33.3)		

Significance at 0.05, €- fisher's Exact test

Table 11 shows the association between the level of medication adherence and belief and motivation-related variables. It revealed that there was a statistically significant association between the level of medication adherence and the habit of seeking traditional health support along with hospital treatment (p=.002). The effectiveness of drug felt by clients had a statistically significant association with medication adherence, which was calculated by Fisher's exact test as p= .027€-

3.8 Discussion

The study was designed to assess medication adherence to psychotropic drugs [23, 24]. The study was intended to identify medication adherence and associated factors among mentally ill clients attending psychiatric OPD at Chitwan Medical College and Teaching Hospital, Chitwan [25]. A total of 155 clients clinically diagnosed as having mental disorders, receiving psychotropic drugs for a minimum of two months and attending psychiatric OPD of CMCTH were taken as a study subject. In this study, 155 clients were studied. Among them, 52.9% of clients were under the age of 40 years, most of the respondents, 61.3%, were female, and 53.5% had secondary and above-level education. A similar finding was stated as the study clients were mostly in the younger age groups, female, and literate [26]. This study showed the level of medication adherence of clients who were under psychotropic drugs for at least two months or more. The level of medication adherence was categorized as high adherence, average adherence and low adherence

[27]. In this study, high adherence means that the clients had never missed the medication, and more than half of respondents had an average level of medication adherence, whereas only 26.5% of respondents had high adherence to psychotropic drugs. A similar study was conducted in Dharan, which revealed that less than half of the patients (37%) showed high medication adherence [28]. Another study conducted in Nigeria showed that less than half of the patients in that study demonstrated high adherence, which suggested that high medication adherence levels were between 40% to 50% of adherence [29]. These results suggested that the majority of clients had low adherence. Even though the adherence was low, the data were inconsistent. This discrepancy in the findings of the study might be due to the cut-off points for the level of adherence and the use of different tools to assess medication adherence. Regarding the association between the level of medication adherence and socio-demographic variables, this study showed a statistically significant association only with the residence. Clients residing in their own homes had higher adherence than the clients who live in other's homes (p=.011) [30]. This finding suggested that the clients or patients would have support, care and sharing of burden within the family, which would be supportive of increasing adherence [31]. However, other studies revealed that there was no association between medication adherence and socio-demographic variables that might be limited by study setting [32]. Among the illness-related variables statistically significant association between level of medication adherence was identified only with duration of illness (p =.033), follow up in right date (p =.002) and reason for follow up (p =.005). In this study, the duration of illness indicates the duration of taking medicine [33], nearly half of the clients have been taking medicine for the last year to five years, and the finding suggested that the longer the duration of taking medicine, the higher the chances of missing drugs. Another significant variable was attending follow-up on the right date, which was done by more than half (57.4%) of the respondents [34]. A similar study conducted in Dharan showed that 94.7% of clients were attending regular follow up. The variation in data may be due to the difference in availability of health facilities, distance or other social variables [35].

4. CONCLUSIONS

The findings of the study concluded that very few clients had high medication adherence to psychotropic drugs which demands active intervention to have cost effective result in care, treatment of mental illness and prevention from relapse. The descriptive cross-sectional study aimed to investigate level of medication adherence to psychotropic drugs and association between selected factors among mentally ill clients in psychiatric OPD of CMCTH, Chitwan who were under medication at least for two month or more. A sample of 155 clients were selected using non-probability convenient sampling technique. Data were collected by using structured interview schedule and medication adherence was categorized in three level. Data were analyzed by using descriptive (frequency, percentage, median and interquartile range) and inferential statistics (Chi-square). The study result revealed only 26.5% of clients had high medication adherence. Statistically significant relationship was found between medication adherence and selected variables as residence of client, duration of illness, follow up visit in right date, dropout when felt well, effectiveness of drugs, perceived stigma due to mental illness, stress and traditional health seeking behavior. Health worker should focus on factors affecting adherence while treating or caring the clients to achieve high adherence. Ultimately high adherence to medication decreases the risk of psychiatric morbidity and mortality.

5. RECOMMENDATIONS

Educational programs and different interventional activities should be planned and implemented by giving more focus to the needs of the mentally ill clients that will increase adherence and shorten the duration of

illness, improve their quality of life and reduce the family burden. Health personnel should become more available to the clients so as to respond to the needs of the clients and provide necessary information and education according to their needs. Hence, health workers and local health planners need to provide their attention to medication adherence, including notable factors, while planning health services for clients having psychotropic drugs. Appropriate policy and additional facilities should be planned and implemented by the nation as a whole by giving more focus to chronic illness as mental disorder clients for better recovery. A similar type of longitudinal study could be conducted at the regional and national levels on a large scale.

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