ORIGINAL ARTICLE

NON-COMPLIANCE - AWARENESS AND ATTITUDE OF PSYCHIATRIC PATIENTS REGARDING OUT PATIENT FOLLOW-UP AT CIVIL HOSPITAL, KARACHI

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Abstract

Objective: To determine the awareness, attitude and causes of non-compliance of psychiatric patients attending the out patient follow up treatment at Psychiatry Department, Civil Hospital, Karachi.
Design: A cross-sectional study.
Methodology: The study was conducted from July 2003 to February 2004 at Civil Hospital, Karachi. A pre-coded pre-tested questionnaire especially designed for this study was used. Non-complaint patients attending the Out Patient Department (OPD) were selected by systematic random sampling method. Non-compliance was defined as attending the OPD after a lapse of 15 days or more from the previous visit. Variables were described in percentages, mean and standard deviation. Proportions were compared using chi-square test.
Results: Non-compliance in follow-up was recorded as 18% in the 100 selected patients. Majority (65%) patients were of the middle age group i.e. 30-49 years with mean age 32.71 ± 10.85 years. Similarly majority of the patients were illiterate (54%), belonged to low-income group (64%) and were unskilled workers (34%). Family history of the same disease was found in 24% patients. Satisfaction of family members from the treatment compared to non-medical faith-healers were statistically significant at $p<0.01$. The main reasons for non compliance of follow-up treatment were (i) the patients denial of having any psychiatric disease (14%), (ii) irregular intake of medicines (14%) and (iii) lack of money for either commutation or purchase of medicine (11%). Only 41% patients were taking the medicines regularly in the prescribed doses and 32% patients could not afford the cost of the prescribed medicine.
Conclusion: Among the studied cohort of psychiatric out patients, non-compliance was 18%. Patients' denial of his disease and non affordability of patient regarding his treatment expenditures were the major causes. Awareness and satisfaction of patients and their family members regarding the increase efficacy and reliability of medical doctors compared to non-medical faith healers, had significant impact over the patients compliance.
Key word: Psychiatry, Non compliance, Treatment, follow-up.

INTRODUCTION

During the last two decades, the number of psychiatric patients has increased significantly, especially in South East Asia region[1]. The main reasons of this trend are high ratio of poverty, illiteracy, unemployment and unsafe enviorment[1]. A study conducted on non-compliance to medication in psychiatric out patients found non-steady supply of medicine as a major cause[1]. Patients who endorse more to medical explanations for their illnesses and made more visits to clinics end the treatment early and in a better way, as compared to others who endorse more on non-medical beliefs about the cause of their illness[2].

Compliance is adherence to the prescribed and appropriate treatment not necessary pharmacological but also in terms of following the prescribed diet and modifying life style in accordance with medical and health advices by the consultant physician[3,4]. Treatment of psychiatric illness

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Received: September 20, 2007; accepted: March 17, 2008

depends upon co-operation and compliance by the patient and their families[5]. It is generally observed that the magnitude of non-compliance in follow-up treatment is very high in psychiatric patients. Due to this attitude, the psychiatric patients suffer from inadequate treatment despite accurate diagnosis and suggested management[6,7]. Delay and irregular follow-up is also a kind of non-compliance for negative consequences than a general realization and understanding of the disease[8]. The situation becomes worse when patients are not ready to accept their disease and consider it a social stigma[9]. In a study[10], it was reported that 37.4 % had a history of early discontinuation of medicines. In another study[11], 62% patients stated that they were given inadequate information about their disease and medicines.

A knowledge of the extent and causes of non-compliance for a particular cohort helps in achieving better compliance by solving the problem issues and develop measures to reduce the ratio of non compliance.

The objective of this study was to determine the frequency of non-compliance in follow up treatment, the awareness and attitude regarding their illness and to find out the reasons of non-compliance among the psychiatric patients attending Civil Hospital Karachi's out patient department (OPD).

SUBJECTS AND METHODS

The study was conducted from July 2003 to Februray 2004 in the Psychiatric OPD of Civil Hospital, Karachi where an average of 70 patients came for treatment daily. Out of those, 70-78 % patients were being called for follow-up. For this study, every fifth patient registered for follow-up treatment in the OPD and coming after 15 days or more of the visiting date was selected on the day of interview.

The study was conducted on 100 patients randomly selected from the OPD of psychiatric department of Civil Hospital, Karachi. A pre-coded, pre-tested proforma, was used to collect the information from the patients. The data regarding socio-demographic factors, family history, reasons for non compliance, duration of non compliance, visit to other non- doctors, ability to afford the cost of treatment, satisfaction from counseling of doctor, pressure to discontinue treatment and other relevant information were collected to assess the relationship of these factors with the non compliance of treatment.

The data thus collected were analyzed according to the objectives and tabulation plan on computer with the help of SPSS programme version 11.5. The test of proportion was applied to assess the statistical significance level.

RESULTS

A total of 100 patients were included. During the study period, non-compliance of follow-up treatment was recorded as 18% in patients attending Psychiatric out patient department (OPD) of Civil Hospital Karachi. There were 47% males and 53% females, with male to female ratio of 1: 1.1. Majority (65%) belonged to 30-44 years of age group followed by 26% belonging to the 12-29 years of age. The mean age of the patients was 32.71 ± 10.85 years. Out of 100 patients, 55% were married (20% males and 35% females). Among the married, 49 had children. Out of those 49, 30 (61.7%) patients had 5 or more children. Majority of the patients (54%) were illiterate. Out of the 46% educated patients; 34 (73.9%) received education up to matric. Similarly majority of the patients (64%) belonged to low-income group (below Rs. 5000/= per month). Majority were unskilled workers (34%), followed by skilled workers (24%) and professionals and service groups (13%). According to the ethnic grouping, 39% were Urdu speaking, followed by 23% Punjabis, 11% Sindhis, 8% Baluchis and 7% Pathans (Table I).

The main initial complaint /symptom (singularly or in combination) before diagnosis of the disease as described by the patient or their attendant were continued senseless talking (27%), depression (24%), fits (22%), headache (17%), head injury (16%), inability to understand (11%), excessive anger (10%), voice hallucination (10%), insomnia (10%), paraonia (10%) and uncontrolled body movements (10%).

Patients were diagnosed and referred by the general practitioners (61%), general medical OPD of Civil Hospital (11%), and private hospitals (6%). However majority (83%) of the patients or their attendants did not know about their actual diagnosis as well as the adverse effects that non-compliance to follow-up treatment could cause. Most of them were of the view that it is a life long treatment and medicines may be taken regularly, only if severity of diseases increases.

Out of the 100 patients selected for this study, blood relatives of 24% patients were also suffering from psychiatric problems. Out of these, 10 patients (42%) had

Table I: Socio-demographic status of patients

1.	**Age vs. gender**	**12-29 years**	**30-49 years**	**50 years and above**
	Male	10	35	02
	Female	16	30	07
	Total	26(26%)	65(65%)	09 (9%)
2.	**Gender vs. marital status**	married	Unmarried	Widow/Widower
	Male	20	27	00
	Female	35	16	02
	Total	55(55%)	43(43%)	02(2%)
3.	**Number of Children(49/55)**	1-2	3-4	5 and more
		12(24.0%)	7(14.3%)	30(61.7%)
4.	**Education level**	%		
	a) Illiterate	54		
	b) Up to Matric	34		
	c) Matric and above	12		
5.	**Income Level**	%		
	a) <Rs.2500/Months	21		
	b) 2500-5000	43		
	c) 5000 +	23		
	d) Not declared	13		
6.	**Occupational group**	%		
	a) Unskilled	34		
	b) Skilled	24		
	c) Professional	13		
	d) House wife	7		
	e) Retired / jobless	17		
	f) others	5		
7.	**Ethnic group**	%		
	a) Urdu speaking	39		
	b) Punjabi	23		
	c) Sindhi	11		
	d) Balouchi	8		
	e) Pashto	7		
	f) Others	12		
	(N=100)			

more than one affected blood relatives.

Time lapses for the treatment were recorded through the date of re-visit cards. Thirty one (31%) patients came after 15 days but less than one month, 40% patients came after one month but less than two months, and 23 % patients came after 2 months or more.

The main reason for non-follow up treatment as described by the patients or their attendant were that patient thought himself alright or did not think it a disease (14%), medicines were available but not taken properly as prescribed (14%), same medicines were purchased with out advice from the local market (13%), lack of money for traveling /purchase of medicines (11%) and no reason at all was stated by (13%, Table II).

Only 41% patients were taking medicines properly as prescribed by the doctors. The main reasons stated were

Table II: Major reasons for non-compliance of treatment

S.No.	Reasons	%
1.	The patient thinks that he/she is all right	14
2.	Medicines were not taken properly	14
3.	Medicines purchased without prescription	13
4.	No money for transportation /purchase of medicine	11
5.	Went to native town	8
6.	Loss of daily wages	6
7.	Spiritual (faith-healers') treatment	6

Table III: Number of patients affording cost of treatment and side effect of medicines

Reasons	Yes (%)	No (%)
Able to afford the cost of medicine	79	21
Whether informed the doctor about it	11	10
Reply of the doctor:		89
a. It is the most economical	9	
b. Issued from the department	2	
Any side-effects of the medicine	11	
Type of side effects:		
A) Insomnia	5	
B) Depression/severe headache	3	
C) Severe headache /excessive sleep	3	

that either patients themselves as healed thinking (12%), lack of money for the purchase of medicine (11%) thinking that medicines be taken in severe conditions only (4%), fear of dependence on continued taking of medicine (3%), or concurrent treatment by faith healers (3%) etc. Before coming to the place of study, 56% patients were attending non-qualified healers that were religion-exploiting faith healers, for their treatment. However after attending this hospital, this was reduced to 37%. Reverting to faith healers was also one of the reasons for non-compliance.

Twenty one (21%) patients said that they could not afford the cost of medicines, whereas 11% were suffering with side effects of medicine. Out of those, 5 i.e. 45% complained of insomnia, 3% of severe headache, and the rest were experiencing excessive sleep (Table III). Regarding satisfaction from treatment, majority (93%) patients were satisfied with the doctor's consultation. The remaining either showed no improvement or inability to perform daily routines due to the side effect medicines. As far the satisfaction of the family, 90% families were satisfied with the treatment. However 33% families wanted

to quit treatment at that particular stage (Table IV).

Table IV: Satisfaction status and family pressure to discontinue the treatment

S.No.	Status	Yes	No	Reasons for non-satisfaction/ treatment discontinuation
1.	Satisfied with the doctor's consultation	93%	7%	**a)** No improvement = 4% **b)** Could not do a job = 3%
2.	Satisfaction of family members with treatment	90%	10%	**a)** Ambiguity or doubts about treatment = 3% **b)** Think that patient is all right = 7%
3.	Family pressure	33%	67%	Out of 33%: **a)** All family members = 20% **b)** Only by husband = 7% **c)** From other relatives/ friends= 6%

DISCUSSION

This study explored factors which led to non-compliance in psychiatric out patients of the largest public tertiary-care hospital in Karachi. High ratio of poverty, illiteracy, unemployment and unsafe environment has been tipped as the major causes believed the rising number of psychiatric cases in South East Asia. In different studies the rate of non compliance of treatment and premature discontinuation of the medicine by the patients was recorded 25.8% to 73%[9, 10, 12-14]. In this study non-compliance was recorded as 18%.

In different studies, the main causes of noncompliance were different. But in majority of the studies, it was recorded that multiple hospital admissions, fear of drug dependence, weight gain, complex treatment regimen and social stigma9, [10, 14, 15]. In the present study 14% non-compliant patients also were of the view that they think they are alright and have no psychiatric disease. In other studies low education levels of the patients and false beliefs about psychotropic medication were the main causes of non-compliance[10, 14, 16, 17]. In another study it was significantly related to dosage schedule and supervision of medication by the relatives[12]. In this study also, non compliance was recorded in 64% patients with low education and income level.

In most of the studies it was pointed out that the patients were not satisfied with their treatment due to inadequate information provided to them by their physician. Various studies have reported this range or involve 62-72% patients[11,15,18,19]. However in this study, the satisfaction of the patient for treatment was 93% which was significantly higher.

The side effect of different medicines used commonly for psychiatric treatment are usually reported to 13-22 %[20,21]. In this study, side effects of the medicine were reported in 11%.

Family satisfaction was not recorded in majority of the studies. However in the present study, family satisfaction was reported by 90% of the interviewed.

The over all non compliance was 18%, out of which the major causes were recorded as patients' denial of his disease and non-affordability of patient regarding his treatment expenditures. Awareness and satisfaction of patients and family members regarding the increase efficacy and reliability of medical doctors compared to non-medical faith healers had marked impact over the patients' compliance.

The main limitation of the study was hospital and not community setting, limited number of patients and cross sectional study design. Moreover psychiatric patients were prone to mistrust and did not consent for interviews which kept the number limited. Still it is an important data which provided knowledge about the key factors operating in non-compliant psychiatric patients and their family.

CONCLUSION

The non-compliance among the studied cohort of psychiatric out patients was 18%. The major causes of noncompliance were patients' denial of his disease and non affordability of patient regarding his treatment expenditures along with low education and low income level. Family pressure on patients to discontinue the treatment was on very high (33%). Awareness and satisfaction of patients and their family members regarding the increase efficacy and reliability of medical doctors compared to non-medical faith healers, had marked impact over the patients compliance.

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