Brief Communication

False beliefs and medication non-compliance in psychiatric patients

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Medication non-compliance is a major contributing factor to therapeutic failure in psychiatry practice. Medication non-compliance was defined as discontinuing medication without the recommendation of the treating physicians. Non-adherence to medication is associated with relapse of psychiatric symptoms. Clinicians should be aware that medication non-compliance may be common and an unpredictable phenomenon, and can become a major treatment difficulty in psychiatric patients. Up to 50% of psychiatric patients refuse medication at sometime during therapy. Sometimes poor doctor-patient relationship and negative counter-transference, evoked during therapeutic sessions may lead to medication non-compliance.[1] Patients with a higher level of education and who were also less fearful of side effects and addiction tended to be more compliant.[2] In our clinical practice in Kerman, Iran we have experienced difficulties with patients who discontinued their medications before the appointed time. After beginning of symptoms, they return seeking treatment. Many of them had little knowledge of psychotropic medications and had false beliefs about them. The aim of this study was to investigate some of these false beliefs.

One hundred and fifty patients referred to the psychiatric outpatient department clinic regardless of their diagnosis were randomly selected. A checklist including 12 questions about false beliefs in psychotropic medications was made, based on clinical experience. After assessing validity and reliability of questions, finally a questionnaire including 8 questions was prepared. Patients' false beliefs were assessed by these questions. Subjects should have had 3 references in the previous 6 months and have a medical chart, to be included in the study. Patients with mental retardation and substance dependence were excluded. From 150 patients, 56 (37.4%) had a history of early discontinuation of psychotropic medications, 91 (60.7%) subjects were female and 59 (39.3%) were male. There was no statistical relationship between sex and early discontinuation of medications. Patients who had false beliefs in psychotropic medications had higher rates of early discontinuation of drugs than those without such beliefs. **Table 1** illustrates the questioned false beliefs, and early discontinuation of medication in patients with and without such beliefs.

Table 1 - Early discontinuation of medications in 2 groups with and without false beliefs in psychotropic medications.

Questions	Early discontinuation of drugs	With false beliefs		Without false beliefs		Analysis	
		N	(%)	N	(%)	X^2	*P*
All psychotropic medications are addictive	Yes	41	(73.2)	32	(34.1)	20.02	0.00
	No	15	(26.8)	62	(65.9)		
Psychotropic medications are different in shape but all have the same effect	Yes	38	(67.9)	83	(88.3)	8.14	0.00
	No	18	(32.2)	11	(11.7)		
It does not make any difference whether you take or do not take psychotropic medications	Yes	31	(55.3)	79	(84)	13.34	0.00
	No	25	(44.7)	15	(16)		
Prices of psychotropic medications are higher than their effects	Yes	39	(9.7)	21	(22.4)	30.78	0.00
	No	17	(30.3)	73	(77.4)		
Effect of opium is higher than psychotropic medications	Yes	40	(71.4)	20	(21.3)	34.72	0.00
	No	16	(28.6)	79	(78.7)		
Psychotropic medications are only effective for somatic complaints	Yes	41	(73.2)	26	(27.7)	27.65	0.00
	No	15	(26.8)	68	(72.3)		
Effects of psychotropic medications are by suggestion	Yes	32	(57.1)	73	(77.6)	6.01	0.01
	No	24	(72.9)	21	(22.4)		
Psychotropic medications are ineffective	Yes	44	(78.6)	91	(96.8)	11.02	0.00
	No	12	(21.4)	3	(3.2)		

A higher rate of early discontinuation of psychotropic medications was considered as a major problem in a clinical practice. Patients who had such beliefs easily discontinued their therapeutic sessions. In other research, fear of dependency and addiction are samples of false beliefs which influenced treatment.[2,3] Other false beliefs which existed in our culture may not be seen in other countries, although these false beliefs may be seen in another forms in other developing countries. The origin of these false beliefs is not well understood. They may originate from superstitions and lack of psycho education in the general community. It was suggested that patient education does have a positive effect on patient's compliance to medication.[4] To improve patient's compliance; many methods were used. In a recent article, research that examined such methods of interventions was reviewed. Forty-nine percent of the interventions were associated with a statistically significant increase in medication adherence and only 17 reported statistically significant improvements in treatment outcomes. Almost all the interventions that were effective for long-term care were complex, including combinations of more convenient care, information, counseling, reminders, self-monitoring, reinforcement, family therapy, and other forms of additional supervision or attention.[5]

In conclusion, psychiatrists, especially those who work in developing countries, are advised to carefully evaluate patients' compliance and their beliefs in psychiatric medications and management. This preliminary assessment could facilitate further management.

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Hypokalemic periodic paralysis as a presenting manifestation of thyrotoxicosis

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Hypokalemic periodic paralysis is an uncommon complication of thyrotoxicosis that occurs exclusively in male Orientals. A few case reports have emphasized its relative rarity among non-oriental populations, particularly among Arabs.[1-5] We report 5 patients who presented with hypokalemic paralysis and were treated in the King Fahad Central Hospital, Gizan, Kingdom of Saudi Arabia.

Patient 1 was a 25-year-old Saudi soldier from Faifa who presented with a 10-day history of recurrent and mostly nocturnal attacks of weakness of all limbs. The attack was aborted only when he was treated with intravenous infusion and potassium in the local hospital, on each occasion. The review of systems was normal. He denied dyspnea, weight loss, fever, heat intolerance, diarrhea, or vomiting. There was no facial weakness. He reported a few similar attacks approximately 4 months earlier. He was taking no drugs. Physical examination showed no jaundice, pallor, peripheral adenopathy, leg edema or exophthalmos. The pulse was 80/min with a blood pressure of 120/80 mm Hg, and the cardiorespiratory systems and abdomen were normal. He was conscious and well oriented with normal cranial nerves and intact sensory system. The muscle power was reduced to grade II in all groups of muscles in the upper and lower limbs. The reflexes were diminished and the plantar reflexes down going. The laboratory investigations are summarized in **Table 1**. Complete blood count (CBC), arterial blood gases (ABG) and chest x-rays were normal. Creatinine phosphokinase (CPK) was 82 U/L, urine pH was 6, sodium was 21 mmol/L and potassium was 9 mmol/L. He was treated with intravenous potassium chloride (KCl) infusion. He regained full muscle power within 6 hours and was discharged in a stable condition on carbimazole therapy.

Patient 2 was a 26-year-old Filipino electrician who had been working in Saudi Arabia for 4 years. He presented with a 4-hour history of difficulty in getting up from his bed and walking. He had several, similar and intermittent attacks during a period of 4 months prior to his presentation to the hospital. The review of systems was negative, and the family history was non-contributory. On