Prescribing Practices for Obsessive-Compulsive Disorder Treatment at The Main Psychiatric Hospitals in Khartoum State, Sudan

Asma Kabashi[1], Anas Ibn Auf[2]

[1]Faculty of Pharmacy, University of Khartoum, Khartoum, Sudan.
[2]Consultant Psychiatrist, Mental Health Hospital, Taif, Saudi Arabia.
Correspondence to: Anas Ibn Auf. Mental Health Hospital, 2826 Abdullah Ibn Umayah, Shihar Dist. Taif 26513 - 6617 Saudi Arabia.
Email: anasibnauf@hotmail.com

Abstract

Introduction:

Obsessive–Compulsive Disorder (OCD) is a chronic disabling disease and proper treatment can alleviate symptoms and minimize disability. This study aims to describe the prescribing practice of the pharmacological treatment of OCD patients at the main psychiatry hospitals in Khartoum state, Sudan.

Method:

It was a cross-sectional hospital-based study totally covers drug prescribers at decided hospitals using a structured 21-item-questionnaire regarding their practice. Descriptive analysis was applied using mean and percent, and Fisher's exact test was carried out on the relationships between variables.

Results:

Eighty-one prescribers participated in the study (response rate= 89%), of them, 44% were males. Sixty prescribers (74%) reported choosing medications according to effectiveness, 8 (9.9%) according to cost, side effects where the concern of 8.6%, while 7.4% choose according to their 'own experience'. The first line preference in OCD treatment for 72 (89%) prescribers was selective serotonin reuptake inhibitors (SSRIs) andwas tricyclic antidepressants (TCAs) for other 9 (11%). Thirty- eight (46.9%) of participants preferred Cognitive Behavioral Therapy (CBT) alone to treat mild OCD, whereas 33 (40.7%) preferred the combination of CBT with pharmacological treatment.There was no significant association between the preferred group of medication and physician factors included in the study. All prescribers haven't seen any local guidelines for OCD treatment.

Conclusion:

This study has shed much light on prescribing practices in the treatment of OCD at the main psychiatric hospitals in Khartoum. Although prescribing practice was generally consistent with international treatment guidelines, establishing local guidelines for OCD treatment is highly recommended.

Introduction:

Obsessive–Compulsive Disorder (OCD) is the fourth most common psychiatric illness [1] andit affects 2% to 3% of the population [2, 3].It is considered as a chronic lifespan illness and was considered untreatable for many decades until the mid-1960s and early-1970s when research showed reasonable outcome with use of Clomipramine in OCD patients [4, 5].Since that time, the use of antidepressants(ADs)has been steadily increasing for treating OCD and many factors were thought to be involved in the drug choice independent of the therapeutic guidelines [6]. Although the study of Zimmerman M. et al. reported that in USA the most important factors affecting drug choice were the type of clinical symptoms and side effects profile of the drug [7], this was not the case in other studies from Asia showed that some demographic factorslike patients age, and type of hospital admission were more important for drug choice than the clinical symptoms [8]. In Europe, the antidepressant choice found to be associated with some doctor's characteristicslike age and specialization,and some patients related factors (severity of depression, age, education, and co-morbidity) [9, 10].

OCD is a disabling disease; the World Health Organization (WHO) has identified OCD to be the 10th leading cause of disability in the world. [11, 12].It causes much distress and social dysfunction and it has severe negative effects on the quality of life of the patients [13].Another fact is that OCD patients usually try to hide their symptoms including thoughts and acts because they feelembarrassedfrom having odd complains, and some of them prefer to isolate themselves because of that, this eventually causes a long delay between the onset of OCD symptoms and the time of receiving treatment and this may complicate the problem [14, 15, 16]. So early diagnoses and proper intervention is highly needed to alleviate symptoms and minimize level of disability [14].

Studies show that a relatively large number of OCD patients are not receivingproper drug treatment [4]. Therefore, there is a great demand to study the actual current practice of OCD treatment in our local medical settings to explore the different options preferred by prescribers and possible associations with their choices.

Research Objectives:

This study aims to describe the prescribing practice of the pharmacological treatment of OCD patients at Taha Baasher, Altigani-Almahi and Aledreesihospitals, which are the main psychiatry hospitalsin Khartoum state, Sudan, and to gain insight into the experience of psychiatrists in OCD treatment. As specific objectives, the study aims to identify criteria for selecting OCD treatment, to identify whether these practices cope with international guidelines, to describe the preference of practitioners in special population(elderly,children and pregnancy), andto assess association between prescribing practicesand physician-related factors(gender, level of specialization and years of experience)

Materials and Methods:

It was a cross-sectional hospital-based study conducted on doctors practicing at Taha Baasher, Altigani-Almahi and Aledreesipsychiatric hospitals which are the biggest psychiatric hospitals in Sudan and they are the only public psychiatry hospitals in Khartoum state.

The study included all prescribers practicing in these hospitals at the time of study; 1st April to mid-May 2016.Data were collected using a structured questionnaire which was developed for the purpose of this study; it was designed to evaluate the prescribing practice of OCD treatment. The questionnaire consists of 21 questions involved 12 multiple choice questions regarding the pharmacotherapy treatment of OCD, three questions about prescribing medication in special cases(pregnant women, children and elderly) and some questions about the adverse effects and how to monitor the therapeutic outcomes.

Data were analyzed using statistical package for social sciences (SPSS) version16. Descriptive analysis was applied using mean and percent to assess the characteristics of the sample, andFisher's exact test was carried out on the relationships between demographic and other variables.

Ethical Consideration:

Ethical approval was obtained from university of Khartoum, faculty of pharmacy, also hospitals agreement and verbal consent of each participants were obtained.

Results:

The study planned to totally coverall prescribers in the three hospitals during the study period. The total number of prescribers was 91, three of them were not responsive and seven were inaccessible, so 81 prescribers were enrolled representing 89% response rate. Of them, 44% were males (table 1).

When they were classified according to their level of specialization, it was noticed that 19 (23.4%) of them were psychiatry residents, 36(44.4%) were registrars; i.e. those who passed part one MD exam in psychiatry and running out their training, the others where specialists who hold either MD in Psychiatry or other equivalent degrees, and consultants, as shown in table1. The same table also shows distribution of prescribers according to duration of experience.

Table 1: Distribution of prescribers according to gender, level of specialization, and duration of experience.

		Number	%
Gender	Male	36	44.4%
	Female	45	55.5%
Level of Specialization	Residents	19	23.6%
	Registrars	36	44.4%
	Specialists	13	16%
	Consultants	13	16%
Yearsof Experience	Less than 5years	45	55.6%
	5-9 years	22	27.2%
	10-15 years	2	2.5%
	More than 15years	12	14.8%
Total		81	100%

When respondents were asked about the most important criterion in the selection of OCD medication, 60 (74%) of them said effectiveness,8 (9.9%) said cost, side effects where the concern of 8.6%, while 7.4% said they choose according to their own experience. Whenthey were asked about the first line preference in treatment of OCD 72 (89%) of them mentioned selective serotonin reuptake inhibitors(SSRIs) and 9 (11%) said tricyclic antidepressants (TCAs) group. Thirty- eight (46.9%) of participantspreferred Cognitive Behavioral Therapy(CBT) alone to treat mild OCD, whereas 33(40.7%) preferred the combination of CBT with pharmacological treatment, 5 (6.2%) chose to give an SSRI, and 5 (6.2%) chose clomipramine.

Regarding treatment of moderate to severe OCD, 62(76.5%) of prescribers preferred the combination of CBT with SSRI or clomipramine, only about 16(20%) preferred to use drugs alone, in addition to 2 participants (2.4%) suggested electroconvulsive therapy (ECT).Regarding the next step if no response shown after a trial of 8-12 weeks, 26(32%) of prescribers selected switching to other antidepressants group, but 24(29.6%) preferred increasing the doseof current drug, 24(29.6%) of them preferred the augmentation with antipsychotic, and 5 (6.17%) selected combining two antidepressant drugs.When it comes to the treatment of resistant OCD, only 37(45%) preferred to use clomipramine augmentation with SSRI, whereas 15(18%) preferred to use more than one SSRI, less than 10% of them preferred administration of ECT, and few of them (8.6%) have chosen SSRI Augmentation with antipsychotics.

Mostof prescribers; n=71(87%) believed that SSRIs have the least side effects among other types of OCD treatments. Also, most of them;n=62 (76.5%) believed that SSRIs have the greatest efficacy in treating OCD, while almost 20% of prescribers suggested TCAsto have the greatest efficacy. Regarding side effects that push prescribers to change the medication, when they present, 56(69%) of them mentionedsexual dysfunction, 11 (13.6%) mentioned sleep disturbance, while 5 (6.2%) mentioned GI upset. Forty of prescribers (49%) start with higher doses than depression for OCD patients, whereas 36(44%) of them start by the same doses.

Most of prescribers;56(69%) preferredat least 1 to 2 years as duration for maintenance treatment for OCD patients, while the rest preferred less than one year. Again, most of prescribers; 64(79%)recommended long term OCD treatment in case of two or more relapses, whereas 16(19%)recommended it in one relapse with severe symptoms.

Fluoxetine waspreferred to be used in pregnancy by 35(43%) of prescribers, whereas paroxetine, sertraline and clomipramine each one had the same frequency of prescribers 13 (16%).Also, fluoxetine was preferred for patients below 18 years, by 48 participants (59%), whereas clomipramine was the choice of 18(22%) of them, followed by paroxetine; 9 participants (11.1%), then Fluvoxamine; 3 participants (3.7%), and Sertraline; 2 participants (2.5%). Again, fluoxetine was the choice of 42(51%) of prescribers to be used in elderly patients with OCD, followed by paroxetine; 18(22%), and clomipramine; 10(12%), sertraline; 5 (6.2%), fluvoxamine; 3 (3.7%), escitalopram; 2 (2.5%), and citalopram; only one participant (1.2%).All prescribers(100%)have not seen any local guidelines for OCD treatment.

Table 2: Choice for the first line of OCD treatment, and preference for the treatment of mild and moderate/severe OCD in relation to doctors' gender:

		Gender		P- value
		Male	female	
Choice for the first line of treatment	SSRI	32 (88.9%)	40 (88.9%)	1.000
	TCA	4 (11.1%)	5 (11.1)	
Preference for treatment of mild OCD	(1) Psychological interventions	16 (44.4%)	22 (48.9%)	0.372
	Clomipramine	4 (11.1%)	1 (2.2%)	
	SSRIs	3 (8.3%)	2 (4.4%)	
	Combination of (1) and (2 or 3)	13 (36.1%)	20 (44.4%)	
Preference for treatment of severe or moderate OCD	(1) Psychological interventions	1 (2.8%)	0	0.833
	(2) Clomipramine or SSRIs	7 (19.4%)	9 (20%)	
	Combination of (1) and (2)	27 (75%)	35 (77.8%)	
	ECT	1 (2.8%)	1 (2.2%)	
Total		36	45	81

Table 3: Choice for the first line of OCD treatment, and preference for the treatment of mild and moderate/severe OCD in relation to doctors' years of experience:

		Years of experience				P-value
		< 5	5-9	10-15	>15	
Choice for the first line of treatment	SSRI	40 (88.9%)	21 (95.5%)	1 (50%)	10 (83.3%)	0.177
	TCA	5 (11.1%)	1 (4.5%)	1 (50%)	2 (16.7)	
Preference for treatment of mild OCD	(1) Psychological interventions	24 (53.3%)	10 (45.5%)	1 (50%)	3 (25%)	0.056
	(2) Clomipramine	2 (4.4%)	0	1 (50%)	2 (16.7%)	
	(3) SSRIs	3 (6.7%)	0	0	2 (16.7%)	
	Combination of (1) and (2 or 3)	16 (35.6%)	12 (54.5%)	0	5 (41.7%)	
Preference for treatment of severe or moderate OCD	(1) Psychological interventions	1 (2.2%)	0	0	0	0.494
	(2) Clomipramine or SSRIs	11 (24.4)	2 (9.1%)	0	3 (25%)	
	Combination of (1) and (2)	32 (71.1%)	20 (90.9%)	2 (100%)	8 (66.7%)	
	ECT	1 (2.2%)	0	0	1 (8.3%)	
Total		45	22	2	12	81

Table 4: Choice for the first line of OCD treatment, and preference for the treatment of mild and moderate/severe OCD in relation to doctors' level of specialization:

		Level of Specialization				P-value
		Resident	**Registrar**	**Specialist**	**Consultant**	
Choice for the first line of treatment	SSRI	19 (100%)	30 (83.3%)	13 (100%)	10 (76.9%)	0.054
	TCA	0	6 (16.7%)	0	3 (23.1%)	
Preference for treatment of mild OCD	(1) Psychological interventions	12 (63.2%)	14 (38.9%)	9 (69.2%)	3 (23.1%)	0.084
	(2) Clomipramine	0	2 (5.6%)	0	3 (23.1%)	
	(3) SSRIs	1 (5.3%)	2 (5.6%)	0	2 (15.4%)	
	Combination of (1) and (2 or 3)	6 (31.6%)	18 (50%)	4 (30.8%)	5 (38.5%)	
Preference for treatment of severe or moderate OCD	(1) Psychological interventions	1 (5.3%)	0	0	0	0.436
	(2) Clomipramine or SSRIs	5 (26.3%)	6 (16.7%)	2 (15.4%)	3 (23.1%)	
	Combination of (1) and (2)	12 (63.2%)	30 (83.3%)	11 (84.6%)	9 (69.2%)	
	ECT	1 (5.3%)	0	0	1 (7.7%)	
Total		19	36	13	13	81

Discussion:

The aim of this study wasdescribing the current prescribing practices in the treatment of obsessive-compulsive disorder in the main psychiatric hospitals in Khartoum. The study showed that choosing between SSRIs and TCAs for OCD treatment was not affected by gender since the same percentage of male and female prescribers (88.9%) have chosen SSRIs. A previous study conducted by Bauer's et al. and involved physicians from several Western European countries, showed that female physiciansmore often prescribe newer antidepressants group; SNRIs, and in Germany they were much less likely to prescribes TCAs, but the authors were unable to explain such finding [17].In another study, Iranian male doctors found to be more likely to prescribe new drugs, but there was no explanation for this difference [18]. However, theeffect of the physician's gender on the selection of antidepressant has not been detected in our study.Effectiveness was found to be the most important criterion in selecting OCD medication as mentioned by (74%) of participant, whereas about 7% of participants mentioned their own experience as an important criterion,which does not appear to be consistent with international guidelines orevidence-based medicine. Approximately 10% of prescribers mentioned "cost"as the most important factor in selecting the medication. Although the Consensus Committee from the British Association for Psychopharmacology is against prescribing cheaper drugs with more side effects that may lead to treatment discontinuation and illness prolongation [19], such a result can be expected in a low-income community, such as Sudan, where a significant number of patients are not covered by the health insurance and for others, some medications are also not covered by the insurance. Then the adherence to costly treatment might be a major concern.

SSRIs group was the most preferred as the first line for OCD treatment mentioned by almost 89% of prescribers. This is consistent with the American Psychiatric Association(APA) guidelines whichsuggest SSRIs to be used as a first line because of their less troublesome side effect profile[20].

In case of no response shown after a trial of (8-12) weeks of pharmacotherapy, there were three options have been chosen by approximately equal numbers of participants. Those were: switching to different antidepressant, increasingthe dose of current medication and augmentation withan antipsychotic. The forth option chosen by the rest of participant (6.2%) was combining two antidepressants. This is partially consistent with APA guidelines which state that at 12 weeks, if a patient has exhibited a partial response to an agent, one might prefer to utilize augmentation strategies instead of switching to a different drug. Augmentation strategies include: increasing the current medication to the highest tolerable dose; using intravenous citalopram or clomipramine or combination regimens such as SSRI plus clomipramine, or SSRI plus an antipsychotic medication [20].

Around two thirds (69%) of prescribers preferred to continue maintenance treatment for at least 1-2 years, and this goes with the APA guidelines[20]and supported bymany studies[21, 22], but on the other hand, 31% of doctors put their OCD patients on treatment for less than one year as a maintenance, which seems to be inadequate duration according to the APA guidelines and this may lead to a high relapse rate as several studies reported a relapse of only 25 to 40% of patients when they discontinue medication after 2 years, in comparison with 80% of patients after shorter periods of maintenance treatment [23, 24].

Although the Food and Drug Administration (FDA) has determined that exposure to Paroxetine in the first trimester of pregnancy may increase the risk for congenital malformations, particularly cardiac malformations, and it has been changed from category C to D [25], still there is a significant percentage (16%) of our prescribers preferred paroxetine for OCD during pregnancy.This practice may be agreed with old study results, before 2005, which considered the SSRI group, including paroxetine, relatively safe to use during pregnancy, as they did not cause increased risk of major malformations above the rate of 1% to 3% found in the general population [26, 27].Later, more recent studies reported higher risk of congenital malformations [28, 29].

Conclusion:

This study has shed much light on prescribing practices in the treatment of obsessive-compulsive disorder at the main psychiatric hospitals in Khartoum which play a major role in the undergraduate and postgraduate psychiatry training in the country. Although prescribing practice was generally consistent with international treatment guidelines,establishing local guidelines for OCD treatment is highly recommended.

Conflict of interest:

The authors declare no conflict of interest.

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