PSYCHIATRISTS' DISCLOSURE OF THE SIDE EFFECTS OF MEDICATIONS TO PATIENTS WITH SCHIZOPHRENIA IN A MAJOR HOSPITAL IN NIGERIA

Okpataku CI
Department of Psychiatry, Bingham University/Bingham University Teaching Hospital, Jos, Plateau State, Nigeria.

Abstract

Background: Crucial factors to consider in the management of psychotic disorders are the side effects of medications administered in these conditions. They commonly occur with all known classes of antipsychotics used in the treatment of schizophrenia, and this influences adherence.
Objectives: This study determines the extent to which doctors disclose the potential side effects of antipsychotics to patients and its association with drug adherence behavior.
Method: Adult patients with schizophrenia who were receiving medications at a psychiatric facility were sampled over a 2-year period. Consenting patients who met the inclusion criteria completed a questionnaire requesting information on the knowledge about side effects of their medications, sources of this knowledge and the side effects they were experiencing while using these pills. They also responded to the Medication Adherence Rating Scale-10. The data generated was analyzed by means of frequencies, means and Chi square test.
Results: 175 respondents were interviewed. Their mean age was 36.01+/-9.71 years, with a male preponderance. 96% of the respondents were not informed about the likely side effects of their drugs before commencing treatment. No statistically significant relationship between having knowledge about side effects and drug adherence p=0.137. All the patients were on conventional antipsychotics with some actively experiencing side effects, most of which were fatigue and somnolence.
Conclusion: The non-disclosure of information about side effects of medications to patients were enormous. There is a need for psychiatrists to give facts and details about treatment to their patients to enhance standard of care

Key Words: Psychiatrist Information, Side effects, Antipsychotics Schizophrenia

Introduction

Side effects of medications is arguably the most crucial factor often considered prior to antipsychotic prescription. They are often intolerable, profound, disabling and constitute a part of the disease burden[1,2]. Side effects influences, and are more predictive of quality of life in schizophrenia than clinical and psychosocial variables[3]. It is a significant contributor to poor adherence of medication in schizophrenia[4,5,6]. Non adherence to medications potentially has grave consequences on patients and their families, resulting in relapse, rehospitalisation, longer time to remission, higher cost of treatment/loss of income, reduced quality of life and attempted suicide[7,8].

Providing information to patients about the potential side effects of antipsychotics is an essential part of management aimed at encouraging favourable patient attitude to treatment and drug adherence. Patients complain about insufficient information about the expected effects of prescribed medications and how it adversely impacts their willingness to use the drugs[9]. Some studies on the need for educating patients with schizophrenia about the side effects of medications reported a potential advantage of such education to relapse prevention from medication discontinuation[10,11,12]. There is an indication of a positive impact of this knowledge of medication to adherence[13].

It is a part of good medical and ethical practice behaviour for health care professionals to give this information. For instance, under the heading for consent guidance of the General Medical Council, this element has been captured: "…You must tell patients if an investigation or treatment might result in a serious adverse outcome even if the likelihood is very small. You should also tell patients about less serious side effects or complications if they occur frequently, and explain what the patient should do if they experience any of them14."

Studies have explored the extent to which doctors give information to their patients about side effects of medications in countries where practice regulations clearly stipulate such information-sharing[14,15]. However, there is relative dearth of information on patients' perspective of how much information they have

Corresponding Author: **Christopher Izehinosen OKPATAKU;** Department of Psychiatry, Bingham University/Bingham University Teaching Hospital, Jos, Plateau State, Nigeria.
Tel. No. +2348188960428
Email Address**:** zehi29@yahoo.com
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received from their doctors. This study therefore aims to determine the awareness and knowledge of side effects of medications in schizophrenia patients. It investigates whether information have been given by doctors and its relationship to drug adherence in a setting where regulations do not clearly stipulate the giving of such information.

Materials and methods

The study was carried out at the psychiatric out-patient clinic of a public federal teaching hospital. It is a major tertiary health facility located in North-West Nigeria. The psychiatry department provides mental health services to patients of the hospital, those referred from other peripheral hospitals, neighbouring cities and other parts of the country. The out-patient clinic has subspecialty units run by psychiatrists and psychiatry-trainees. However, psychotropic medications are first prescribed by a consultant psychiatrist. After this, trainees may write drug- refill prescriptions for stable patients under the guidance of their supervising consultants.

It was a study of adult patients (18 years and above) with schizophrenia attending the outpatient clinic. An average of six patients were randomly selected per week over a 2-year period from May 2014 to April 2016. There were two clinic days per week, run by 21 doctors who had different and changing schedule of clinic activities. Therefore, on each clinic day, the first three eligible patients to consult the first three doctors to arrive at the clinic were selected. At the next clinic day, this process was reversed to include the last 3 consultations. To prevent repetition of data collection, case notes were assigned unique number identifiers to distinguish those who had been interviewed previously. There was a 2-months industrial strike action which interrupted data collection for that period.

Those selected had been diagnosed by a consultant psychiatrist using the International Classification of Disease (ICD-10) criteria before the preceding 12 months, had been receiving antipsychotics for at least 1 year prior to the interview and were regular attendees at the clinic. Patients who were clinically unstable and had marked cognitive dysfunction were excluded from participation.

The instruments used includes:

1. A form which extracted socio-demographic information related to some key variables of the participants such as age, sex and religion.
2. A questionnaire regarding the knowledge patients have and the information they have received on the side effects of medications such as: “are you aware of any side effects of the drugs you are taking?” “Were you warned about side effects by your doctor when you first started to use the drugs?” …etc.
3. The Medication Adherence Rating Scale (MARS). The Medication Adherence Rating Scale (MARS) is a ten-item self-report measure of medication adherence in psychosis. It was developed based on the Drug Attitude Inventory (DAI) and Medication Adherence Questionnaire (MAQ). It is designed and validated for patients with schizophrenia[16]. The MARS assesses both beliefs and barriers to medication adherence[17], at the implementation and discontinuation stage of the medication talking. The MARS is scored from 0-10, in increasing order of adherence. Each question gets 1 mark. Reverse scoring was made on Questions 7 & 8. A total score of 6 and above was taken as “good adherence” while a score of 5 and below indicated “poor adherence.”

The instruments were translated to Hausa language using back-translation method. The interview was also conducted in Hausa language by doctors who were proficient in the language, as this was the predominant language understood by majority of our study population.

The Health Research Ethics Committee of the Ahmadu Bello University Teaching hospital approved the study protocol. In addition, informed consent was obtained from each eligible participant, after explaining the purpose of the study, reassuring them of confidentiality and that there was not going to be any consequence for non-participation.

Eligible patients were identified on each clinic day after retrieval of their clinical records, and prior to seeing their doctors. On each clinic visits, the first three eligible patients to be seen by the first three doctors to arrive the clinic were selected. At the next clinic, the last 3 patients to consult the last three eligible doctors to arrive the hospital were selected. This procedure was maintained until one hundred and seventy-five patients were interviewed. Data collection was interrupted for about 2 months as a result of industrial strike action at the hospital which grounded all clinical activities. The data obtained was entered and analysed by means of descriptive statistics using the Statistical Package for Social Sciences for windows (SPSS) version 20 (SPSS Inc. Chicago).

Results

The age of the respondents ranged from 18 to 60 years, with a mean of 36.01+/-9.71 years. There were 100 males and 75 females. 81% of them were Moslems while 19% were Christians. Their average years of education was 8.81, SD 5.70. The age of the respondents was split into a dichotomous variable of 40 years and below and the above 40s. There was no statistically significant relationship between the age and sex groupings and adherence. However, this association was found between religion and adherence [table 1].

“Knowledge of side effects” stands for the information patients had on this subject at the time of interview, and the means through which they knew is the “Source of knowledge of side effects.” “Doctors prior information about side effects” represents the initial status of information provided by the physician who first prescribed the medications

Table 1. Relationship between bio-demographic variables and medication adherence

	Poor adherence	Good adherence	Statistics
Age			P=0.834
< 40years	43	85	
>40 years	15	32	
Sex			P=0.963
Male	25	50	
Female	33	67	
Religion			P=0.004
Christianity	18	15	
Islam	40	102	

57.7% of the respondents had no knowledge about the side effects of antipsychotics medications up to the time of the interview. Among those who knew about side effects, a slight majority (54.1%) reportedly became aware by personally experiencing these side effects. Only 4% received prior warning from the first prescriber about potential side effects at the point of commencing antipsychotic therapy [table 2].

Table 2. The distribution of knowledge about side effects of the respondents

	Frequency	Percentage
Knowledge of side effects		
Had knowledge	74	42.3
Had no knowledge	101	57.7
Source of knowledge of side effects		
Doctor told me	32	43.2
It happened to me	40	54.1
Other sources	2	2.7
Doctor's prior information about side effects		
Given	7	4
Not Given	168	96

On the MARS, 115 (65.7%) respondents had good adherence. Of these, 44 patients had knowledge about side effects while 71 had none up to the time of interview. There was no statistically significant relationship between having knowledge about side effects and drug adherence p=0.137.

The use of antipsychotics in the respondents ranged from 1 to 30 years, with a mean duration of 7.65±6.05 years. The respondents were largely prescribed the conventional antipsychotics. 100 respondents were receiving haloperidol, which was the most prescribed drug, 53 of them were placed on chlorpromazine and 33 were on trifluperazine. The most commonly reported side effect of these medications was fatigue [figure 1].

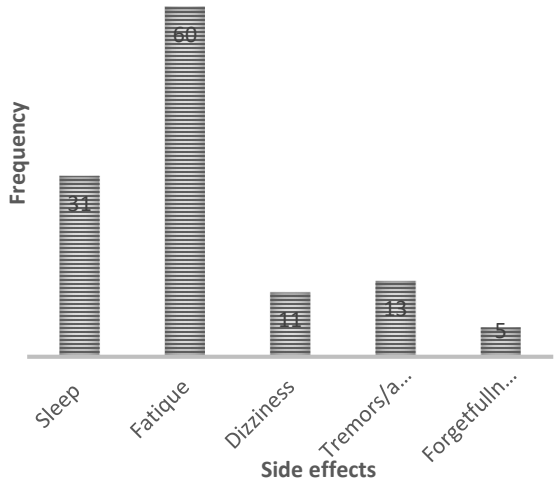

Fig 1.

Discussion

This study was carried out among patients with schizophrenia who were visiting the psychiatry out-patient clinic of a tertiary hospital. Most of the patients attending this clinic were found to be young and in their third and fourth decades of life. A study conducted earlier among same patient population found 67% of the respondents below 40 years of age.[18] Similar findings have also been reported in central India and China.[19,20] However, another crossectional survey among schizophrenia out-patients in a hospital in Nigeria documented that 40% of their respondents were in that age category.[21] This variation could be partly accounted for by methodological differences, as the later study was conducted over a relatively shorter period of 10 weeks, utilizing patient samples recruited "consecutively."

Schizophrenia is a psychiatric disorder more or less of young people, with the typical age of onset being in late adolescence or early twenties.[22, 23]

A higher proportion of male respondents were found in this study. Similar findings have also been recorded in Nigeria, India, Germany and China.[19,20, 21, 24] It has been traditionally held that schizophrenia has equal incidence and prevalence in both sexes. The onset of schizophrenia is earlier in males, with a slight delay in females.[22, 23] This disorder is diagnosed in more men than women, with a male to female ratio of 1.4:1.[25, 26, 27]

The extent to which patients were adherent to their prescribed medications was not significantly associated with age and gender. Age and gender of patients are apparently not significant bio-demographic correlates of medication adherence in schizophrenia. Studies are not in agreement on the nature, direction and strength of the relationship between these patient-related variables and drug adherence. While some reports suggest poorer adherence behaviour among younger patients,[28,29,30]

others lack evidence or did not show any relationship between age and gender, and antipsychotic drug adherence[31,32]. In a review, Fenton et al opined that demographic variables were not consistently associated with "compliance" in schizophrenia. Of the Eleven relevant studies assessed by them on the relationship between one or more patient demographic characteristics and compliance, eight of ten found no association with age and six of nine found no association with gender[33].

Islam is the major religion practiced by the indigenous people of our study community and indeed the Northern region of the country and has largely accounted for their higher proportion among the respondents. Religion was reported to be a predictor of adherence to treatment among patients with schizophrenia.[34] Religion and ethno-cultural believes about severe mental illnesses such as schizophrenia are crucial determinants of illness behaviour. Group and individual attitudes towards the experience of the disorder and its sufferers among our study population and indeed Nigerians in general could be stronger than imagined. There is an existing potent belief among adherents of the two major religions that schizophrenia is a condition incurred from evil forces and spirits, demons, sinful behaviour and nemesis. This results in the resort to spiritual help through the form of prayers and other non-orthodox methods of treatment. Empirical evidence reveals that patients with schizophrenia in this population often refuse or do not accept the use of medications because of the belief that they have or will receive spiritual healing, and the use of drugs undermine this power of God to heal them. Some studies reported that religion and religiousness is associated with better treatment adherence, whereas others suggest otherwise[35,36,37].

This study did not find a strong association between the knowledge that patients have about the side effects of the medications they were using and their willingness to use these drugs appropriately. Adherence is influenced by other factors that were not evaluated in the current investigation. Besides profile and severity of side effects, type and number of antipsychotics, gender, marital status, positive treatment attitudes, awareness of the need for treatment, receiving welfare and support with drug purchase, have all been found to influence drug adherence[38,39,40].

The findings of a high percentage of patients who had no knowledge about the potential side effects of their medications is of concern. This is at least to the extent that this dearth of information from physicians to patients deprives them the fundamental right to understanding the inherent risks of the doctor's prescription and making an informed choice as to whether or not they prefer this mode of treatment, which reflects patient's autonomy. Although, a lot has been done in understanding the critical issues of side effects and patients' wellbeing, most of these studies have focused on its association with treatment variables such as medication compliance behaviour[41-44]. Research that specifically elicits the knowledge of side effects in patients with schizophrenia are very scanty. However, a study investigated the attitudes of consultant psychiatrists in three countries to informing their patients about the long-term risks of medication, in particular, tardive dyskinesia (TD). The proportion of Dutch, UK and Spanish respondents who indicated that they discussed the risks of TD with patients started on neuroleptics were 94, 87 and 70 percent respectively.[45] It is to be noted that this multicentre report is from a clinician's perspective. In addition, it was based on all patients who received treatment and not specific to those with schizophrenia.

Over half of the patients on antipsychotics for schizophrenic disorder became knowledgeable about the side effects of their medications from sources other than the prescribing physician. This source was mainly by experiencing the effects themselves. Furthermore, it is instructive to note that almost all the patients were never given any information about side effects at the commencement of antipsychotic therapy. It wasn't possible to determine the reasons for this lack of disclosure from the doctor's perspective as this study was carried out among patient population who see different teams of psychiatrists during their clinic visits. Hopefully, this would be considered in future investigation. However, one could speculatively say the reason could be that providing such details to patients wasn't routinely practiced as a standard of care at the clinics or doctors do not feel a sense of duty to do so.

Generally speaking, physicians are obliged to provide information to patients sufficiently enough to help them anticipate and or avert injury or potential harm from treatment. It is part of the principle of duty of care established decades ago that physicians have a general duty to take reasonable care to forestall harm to their patients[46]. In some jurisdictions of the world, doctors are legally expected to take an informed consent for treatment.[47,48] This is more so prior to administering antipsychotics, mainly because of their propensity to cause fatal or disabling side effects. For instance, the American Psychiatric Association recommends that patients on conventional antipsychotics be informed about the risks of tardive dyskinesia[49]. However, just about fifty percent of psychiatrist follow this recommendation[50]. The Mental Health Laws in Nigeria are archaic and obsolete at present and they grossly do not recognize the rights of patients[51]. If taking informed consent for treatment was part of the standard of care in the settings of the current study, patients would invariably be warned about potential side effects of their medications as part of facilitating their informed decision-making.

All patients sampled in this study were receiving conventional antipsychotics at the time of the interview. A previous report amongst same patient population had showed a very high preference for the use of first generation antipsychotics[18]. This may have been

because of the relative lower costs and availability of this group of drugs in the study community. Doctors' long term experience with the first generation drugs may also play a key role in this observation. In addition, patients or clinicians may also choose the typical antipsychotics over the atypicals due to their familiarity with the former. Following from this, are the associated side effects of this class of medications. The typical or conventional antipsychotics cause a wide range of adverse effects.[52,53] However, fatigue and somnolence were the main problems reported by respondents in the current study. This may not necessarily reflect the overall burden of side effects on the patients as these symptoms are known to fluctuate in intensity in the same patient over time or vary in character amongst different people.

The presence of side effects in the respondents alludes to the need for psychiatrists to give information or warn patients about the likely problems that may result from antipsychotic use. Considering the troublesome nature of these side effects, patients' quality of care could be significantly improved by the simple provision of facts or details about the nature of treatment.

Importantly, by the very nature of schizophrenia, some respondents may have been oblivious of the presence of some side effects. Moreover, side effects were assessed by questioning, which was liable to forgetting, recall bias, under- or over-reporting. Perhaps an additional physical examination for side effects would have added strength to this study and will be considered in future.

Conclusion

The management of major mental disorders such as schizophrenia is largely through the administration of antipsychotics, which is often given for a long period of time. The use of these medications are associated with varied degrees of troublesome and rarely fatal side effects. This necessitates the need for the prescribing physician to provide information about the drugs to their patients so as to enable them participate knowledgeably in their management and make informed-decision about treatment. Findings from this study show that patients are indeed burdened by side effects of drugs given by their doctors, who rarely disclose to them the potential problems related to their use. It is a recognized standard of care in medical practice for physicians to take all necessary measures to protect their patients from harm or foreseeable injury. Although no statistically significant relationship was established between information receipt and adherence, information-sharing may be an important strategy to improving drug adherence. Therefore, future studies in this direction is advocated.

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