

Assess the Caregiver's Knowledge on the Adverse Effect of Antipsychotics in the Selected Psychiatric unit of South India

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Abstract

Background of the study: Antipsychotic drugs are chemicals that influence the brain and nervous system in various ways, and they are frequently used in the practice of psychiatry to treat a broad range of mental and emotional illness. The use of antipsychotics has reduced the number of patients hospitalized for mental illness up to 50 % in the United States. Researchers worldwide have compared various family interventions to enhance caregiver's knowledge of antipsychotics, its side effects and prevent relapse, which concluded that Psycho educational interventions are more effective in increasing knowledge and reducing stress among the caregivers. Psycho educational intervention is a systematic approach based on patients and family needs. The psycho education mainly emphasizes improving patient and family knowledge about the disease, coping with illness, and managing the adverse drug effects of psychotic drugs. The study aimed to assess the caregiver's level of knowledge on the adverse effects of antipsychotics and its association with the selected demographic variables

Methods: A descriptive survey design was used in this study with the one hundred study participants selected using a purposive sampling technique and visiting the tertiary hospital of Mangaluru, south India. A Self-structured knowledge questionnaire was administered to the study participants.

Results: The caregiver's knowledge of the adverse effects of antipsychotics were assessed using descriptive statistics. The results highlighted that more than half of the caregivers (67%) had inadequate knowledge of the adverse effects and management of antipsychotics, while 33% of them had adequate knowledge.

Keywords: Schizophrenia, Caregivers, knowledge, antipsychotics, adverse effects.

Introduction

In psychotic disorders, psychopharmacology is the "Gold Standard." The concept of psychopharmacology is widely used to treat specific psychotic disorders with significant effectiveness¹. One among them is an antipsychotic drug that has chemicals that affect the brain and nervous system in various ways, and they are frequently used in the treatment of mental and emotional

illness.² Around 500,000 patients were hospitalized in the United States for mental illness in the mid-1950s, but by 1973 that number had drastically fallen to 250,000, mainly due to psychoactive drugs.³ Antipsychotics may be useful in relieving positive and negative symptoms. It is observed that antipsychotics improved the quality of life in most of the patients. But not effective in few other patients.⁴ However, long term use of these drugs may lead to side effects such as extra pyramidal symptoms and metabolic syndrome.⁵ These side effects and adverse reactions to drug therapy impact the lifestyle of the individual and caregivers. Therefore, mentally ill patients' caregivers need to have extensive knowledge of antipsychotics and its management of adverse effects. Existing research evidence suggests that imparting knowledge to the caregivers can reduce stress and

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improve the quality of care provided by them.⁴ India, families are the primary caregivers to individuals with mental illness.⁵

However, due to a lack of awareness about treatment for mental illness and its care at home, they cannot support and realize the patient’s psychological needs, which can lead to unsatisfactory progress of the illness and added burden to the caregivers⁶ Therefore all caregivers must understand the adverse effects of antipsychotics, precautions, and management while taking care of the mentally ill client.⁷ It is the fact that caregivers get burned out, distressed, or burdened because of ignorance of the treatment and ways to manage their maladaptive behavior.⁸ Hence imparting knowledge to the caregivers or family members on adverse effects of antipsychotics for mentally ill patients improves their favourable attitude towards psychiatric patients.⁹

In this background, we undertook this study to assess the caregiver’s knowledge of the adverse effect of antipsychotics in the Psychiatric unit of 1200 bedded tertiary hospital, Mangaluru, in South India.

Materials and Methods

A descriptive survey design was adopted in this study as a research design. One hundred caregivers were recruited through a purposive sampling technique. However, the caregivers diagnosed with any co morbid disorders were not included in the study. Ethical clearance was obtained from the Institutional Ethics committee (Reference No-NUINS/CON/NU/IEC/2016-17). The

necessary socio-demographic information was obtained from one hundred caregivers as per the inclusion criteria for the study. Fourteen item knowledge questionnaires were used to assess the caregiver’s knowledge of antipsychotics treatment, management, adverse effects with the option of Yes / No/I do not know.

The knowledge questionnaire was validated by five experts from the field of psychiatry and pharmacist. The reliability of Chronbach’s correlation and coefficient was 0.768($r= 0.768$), which indicated that the tool is reliable. The level of knowledge was graded as inadequate knowledge (1-14) and adequate knowledge (15-28). The minimum score given is 1, and the maximum score is 28. The pilot study was conducted among ten caregivers of patients who have possessed similar characteristics of the main study subjects. The pilot study report showed that the research methodology, data collection instruments adopted in the study was feasible to conduct further research.

The primary study data were collected by obtaining written permission from the Medical Superintendent of the territory Hospital, Mangaluru, South India. The investigator-initiated the data collection by a self-introduction to the study participants. Study participants were explained about the objectives and purpose of the study, and informed consent was obtained. Confidentiality was assured before administrating the research tool. Data were analyzed using descriptive and inferential statistics. The collected information was summarized by using descriptive statistics.

Results

Section I: Socio-Demographic profile of the Caregivers

Table 1 -Distribution of demographic characteristics of the caregivers

n=100

Demographic characteristics of the caregiver		Frequency (F)
Age	18-30	7
	31-40	35
	41-50	58
Gender	Male	49
	Female	51

Cont... Table 1 -Distribution of demographic characteristics of the caregivers**n=100**

Education	Primary	41
	Higher primary	21
	Graduate	24
	Postgraduate	7
	Professionals	4
	Others	3
Relationship with the patient	Father	10
	Mother	23
	Siblings	28
	Wife	10
	Husband	8
	Others	21
Number of years stayed with the patient	Less than 10	20
	11-20	21
	More than 20	59
Concern towards patient and illness	Concerned	94
	Not concerned	6
On regular treatment	Yes	90
	No	10
History of relapse	Yes	49
	No	69

Table 1 shows the distribution of demographic characteristics of the caregivers. The majority were females and between the age group 41- 50 years (51% and 58 % respectively). Most of the caregivers had a primary education (41%). Among 100 caregivers, 33 were parents, 28 were siblings, 18 were spouse, and 21

were having other blood relationships with the patient. Most of the caregivers stayed for more than twenty years with the patient (59 %). The majority of caregivers showed concern towards the patient, i.e. 94 caregivers. The caregivers reported that 90% of the patients were on regular treatment, and 49 % had a relapse history.

Section II: Caregiver's knowledge of adverse effects of antipsychotics.

n=100

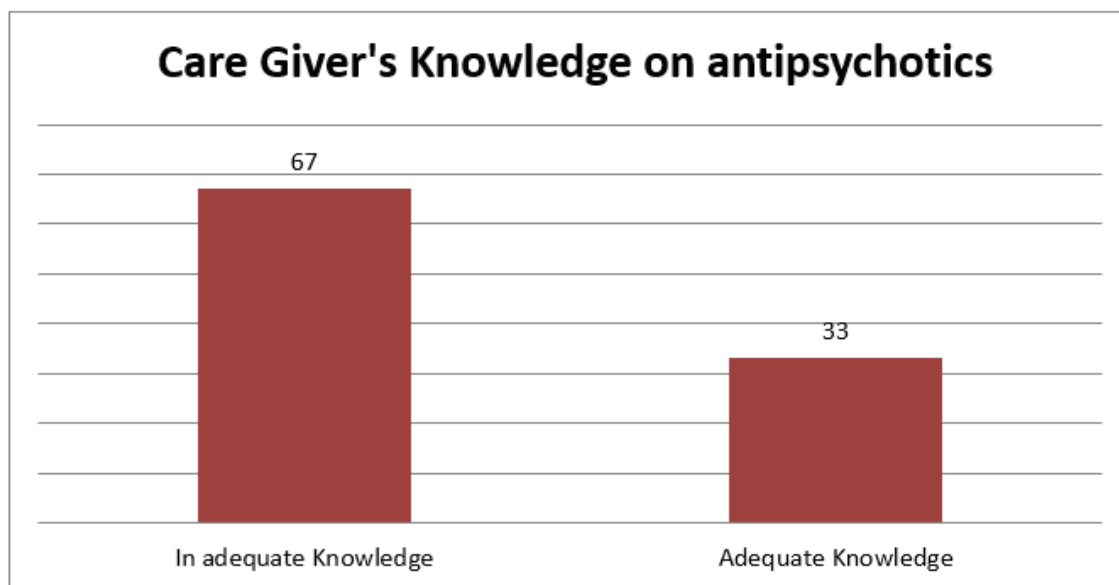
**Figure 1- Care givers knowledge on adverse effects of antipsychotics**

Figure 1. shows the level of knowledge on adverse effects of antipsychotic drugs among one hundred caregivers of the psychiatric patients who have visited the psychiatric unit of a tertiary hospital, Mangaluru, South India. Out of one hundred subjects, 67 of them had poor knowledge, and 33 of them had good knowledge of antipsychotics.

Discussion

The present study findings showed that the caregivers' age varies from 18 to 50 years, and most of them were above 31 years (93%). Moreover, 51% of subjects were Female. The majority of the study participants had a Family income of less than 5000 INR per month (46%). The present studies also highlighted that the majority of them were unemployed and had an education below high school, which was 58% and 62%, respectively.

The findings of the present study are in congruence with the research study conducted by. Manipal University on practice knowledge on atypical antipsychotic Drugs among Caregivers of Mentally ill Patients⁹. The study highlighted that the subjects' age was 21 to 50 years,

and most of them were above 31 years of age, i.e., 76%. Male and female participants were equal in number, which was 50% in each. Also, the majority of the subjects had education below the secondary level. The majority of the finding is congruent to the present study because of the similar geographical area, which is in the Dakshina Kannada district. Both studies are done in a similar setting, the psychiatric unit with the same sample size and data collection method. However, this study findings were contrary to the subjects' occupation status, where most of the subjects were employed (83%)⁹. The occupational status is contrary to the present study finding since most of the participants were females from rural areas and homemakers. This given results emphasized that most females from the rural population need empowerment with education and occupation.

The present study results show that most caregivers (67%) have inadequate knowledge of antipsychotics, and 33% have adequate knowledge. This finding contradicts the study conducted by waghela et.al⁹ 45% of them had good knowledge, 45% had an average, and 6% had poor antipsychotics knowledge. However, the study's finding difference was noted since most of the study participants of the present study had primary education

and belonged to the rural community where exposure to psycho education is comparatively less because of stigma and ignorance regarding mental illness. There is a considerable gap between caregiver's knowledge of psychiatric treatment. Hence, immediate psychiatric treatment should modify their treatment protocol, which included an emphasis on the caregivers' physical and psychological well-being.

There was no significant association found between caregivers' knowledge and selected demographic variable in the present study. This study finding contradicts the study conducted by Waghela et.al⁹ were the variables previous exposure to atypical antipsychotics, patient's diagnosis, age, education and occupation are associated with caregivers' knowledge at 0.05 levels of significance⁷. However, the study's results difference probably because of the small sample size, and the majority of the participants are from the rural community. Also, there was no equal distribution of gender among the study participants. Furthermore, researchers can focus on the comparison of the knowledge level between different types of antipsychotics. It helps them to manage the symptoms.

Conclusion

Family/caregivers play a significant role in the care of the mentally ill individual. Understanding the patient's disease condition and the medication or treatment used to alleviate the symptoms reduces the caregivers' burden. It is essential to prevent relapse and manage the patient at home vigilantly and affectionately, reducing caregivers' burden. Imparting knowledge to the caregivers with the help of psycho education or any other medium can cause an increasing change in the attitude and quality of care among the caregivers. However, the rural population must be targeted to give health education on mental illness and reduce stigma.

Conflict of Interest: Nil

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