

Neuroleptic Medications Side Effects among Patients with Schizophrenia

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Abstract

Schizophrenia is a chronic psychiatric disorder and the most common prevalent among clients in community mental health centers. Neuroleptic medication (antipsychotic) is drug use to reduce psychotic symptoms such as hallucinations and delusions. But these drugs have numerous adverse effects there are two kinds of Neuroleptic medication (antipsychotic); typical and atypical, antipsychotics. Parkinsonism is commonly side effect of this medication drug-induced Parkinsonism. This refer to that the difference of activation of excitatory in basal ganglia. Dopamine usually has an excitatory influence on the direct pathway via D1 receptors to facilitate cortically initiated actions and an inhibitory influence on the indirect pathway via D2 receptors, which generally delays voluntary movement through thalamic inhibition. Anticholinergic medications such as procyclidine are effective for the relief of Parkinsonism side effects. Analytical design was conducted from 12 April to 20 July 2020 to assessment side effects of antipsychotics. Non-probability (purposive) sample of 50 schizophrenic patients who were diagnosed by psychiatrist with schizophrenia. So they receive medication for more than one year. Sample was selected from Al-Diwaniyah Teaching Hospital psychiatric department. Data were collected by sing a un-structured interview with their family. Results of study reveal that the majority (40%) of the study sample were at age of (46-55) year's old. more than half (56.6%) of the patients they were used use of Procyclidine for treatment of Extrapyramidal side effects.

Keywords: Parkinsonism • Antipsychotics • Patients

Introduction

Antipsychotic medications have main effect in reducing or eliminating symptoms of schizophrenia, such as delusions, hallucinations, and distorted thinking. After immediate symptoms resolve, but antipsychotic drugs can have severe side effects, including drowsiness, muscle stiffness, tremors, weight gain, and restlessness. The newer (second generation) antipsychotic drugs that are most often prescribed are less likely to cause muscle stiffness and tremors [1].

The differences between the first and second generation of antipsychotic is second-generation antipsychotic have less side effects than other type. Regarding to tardive dyskinesia, muscle stiffness, and tremors, but these drugs cause significant weight gain. The first-generation of antipsychotics (typical). Have been found since the 1950s and work by blocking postsynaptic dopamine receptors while Atypical Antipsychotics or Second Generation Antipsychotic Drugs. These new medications were approved for use in the 1990 [2].

There are two types of antipsychotic medications; typical and atypical. These agents of medications have a difference effect in treatment of the disease symptoms and they side effect. Typical antipsychotics; They last to be suitable in the treatment of severe psychosis and behavioral problems when newer medications are ineffective.

Kahn and his collages reveals comparison between antipsychotics medication in regard their side effects (Figure 1).

The result of antipsychotic side effects presented that the Parkinsonism is high rate than other side effect of antipsychotic medication.

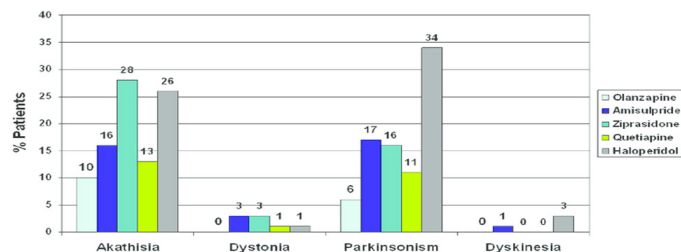


Figure 1. Reveals comparison between antipsychotics medication in regard their side effects.

Description

Descriptive study was conducted from 12 April to 20 July 2020 to assessment side effects of antipsychotics medication among patients with schizophrenia at Al-Dewaniyah teaching hospital. The instrument of the study consists of demographic characteristics of sample and clinical symptoms of side effects by using (Simpson-Angus Scale [3]. Non-probability (purposive) sample of 50 schizophrenic patients who has a medical diagnosis with schizophrenia and treated with antipsychotic medication was selected from Al-Dewaniyah Teaching Hospital psychiatric department. Data were collected by using unstructured interviews were constructed with chronic schizophrenia patients and their family who were attended Al-Dewanyia teaching Hospital psychiatric department to take their medications. After permission was arranged from Al-Dewaniyah Teaching Hospital psychiatric department as well as the oral permission was taken from all of the participants and their family. Criteria of inclusion: Patients who

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have schizophrenia. The patients who were over 18 years old. Who has side effects of antipsychotic medication? Face validity of the questionnaire was determined throughout the panel of experts within psychiatric specialists. They were evaluating it and give some adjustments that made in form of questionnaire. The reliability was determined through the implicated the test and retested technique on five patients with schizophrenia after two weeks of the first interview, the result of reliability test was $r=0.87$ this result refer to this questionnaire is highly reliable because the study instrument is based on scale that was used. Statistical analysis was used in result of study is divided into descriptive statistic and inferential statistic according to (Spss version 22).

Results and Discussion

The result of the current study demonstrates that most of patients age groups (40%) in Figure 2. At age (46-55 yr). This result agrees with the study of [4]. Also this result reflects that most of the schizophrenic patients have chronic schizophrenia and treated with antipsychotic medication for more one than year. Also this result reflects these patients they have antipsychotics for long period.

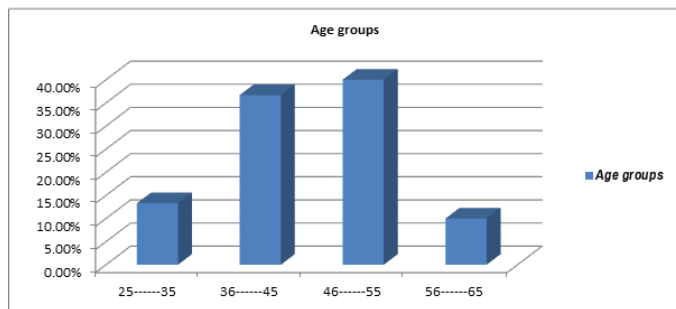


Figure 2. Distribution of the study sample according their age groups the result of this figure shows that the majority (40%) of the study sample were at age of (46-55) years old. While (10%) of they were old age at (56-65) years old.

Also the result of Figure 3 shows that the typical antipsychotic medication cause extrapyramidal side effect than atypical antipsychotic medication, such as Several different types of extrapyramidal symptoms can be seen to antipsychotic use in patients including neuroleptic-induced acute dystonia, neuroleptic-induced akathisia, neuroleptic-induced parkinsonism this result is congruent with the study of they found that extrapyramidal side effect occur by typical antipsychotic medication than atypical antipsychotic medication [5]. Also the result of the study presented that most of the schizophrenic patients they have metabolic disorder such as weight gain they were treated with the atypical type of antipsychotic medications like clozapine and Risperdal. So the result of the study shows that more than half of the schizophrenic patients they were used of Procyclidine for treatment their side effect, that was result of typical antipsychotic medications. The study refer that their symptoms are decrease after medication. Procyclidine was prescribed for our patient for the prevention of dystonic effects of the antipsychotic medication and other symptoms [6].

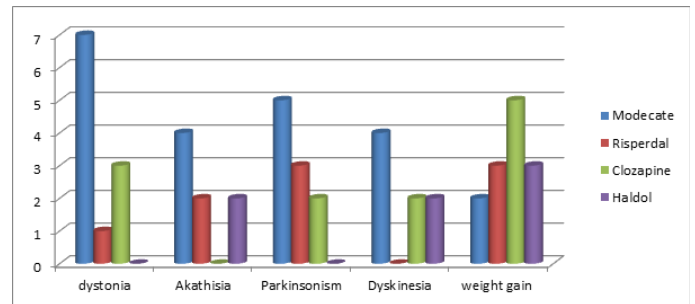


Figure 3. Patients they have extrapyramidal side effect such as dystonia that was result as a side effect of modecate as well as parkinsonism and dyskinesia. Also this result reveals that the patients were treated with second-generation of antipsychotic medication they were have weight gain such as clozapine and risperdal medications.

Conclusion

Schizophrenia is a chronic psychiatric disorder and the most common prevalent among clients in community mental health centers. Neuroleptic medication (antipsychotic) is drug use to reduce psychotic symptoms such as hallucinations and delusions. But these drugs have numerous adverse effects there are two kinds of Neuroleptic medication (antipsychotic); typical and atypical, antipsychotics. Parkinsonism is commonly side effect of this medication drug-induced Parkinsonism.

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