



Traffic offences among adults with attention deficit hyperactivity disorder in Oman



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AIM AND SPECIFIC OBJECTIVES

The study is aimed to explore whether the pharmacological management with ADHD medications reduces the traffic offences in patients with adult ADHD.

Specific objectives:

1. to determine whether the pharmacological management with ADHD medications is beneficial to reduce the traffic offences among adult ADHD patients.
2. to compare the rate of traffic offences among adult ADHD patients before and after taking the medications.

METHODOLOGY

This is a retrospective cohort study was conducted at Sultan Qaboos University hospital (SQUH) to explore whether pharmacological management with ADHD medications reduces traffic offenses in patients with adult ADHD. This study included all patients attending SQUH’s adult ADHD clinic who have valid driving licenses. The rate of traffic offences before and after taking medications as well as gender, age and causes of traffic offences were obtained.

The collected data were analyzed by the Statistical Package for Social Sciences (SPSS program) software. The data was presented as categories of variables and was presented as frequencies and percentages using descriptive statistics.

RESULTS

- There was decrease in number of traffic offences in 57.1% of all patients included. There was no change in traffic offences in 28.6% of patients between 18 and 25 years and in 21.4% of patients more than 25 years. There was increase in traffic offences in 14.3% of patients between 18 and 25 years and in 21.4% of patients more than 25 years.

Traffic offences after taking medications	Age groups	
	18-25	>25
decreased	4 57.1%	8 57.1%
Not changed	2 28.6%	3 21.4%
Increased	1 14.3%	3 21.4%

Table 2 Numbers of traffic offences after taking medications and age groups

JUSTIFICATION OF RESEARCH

There are no studies from Oman, or its neighbouring countries, have scrutinised the driving violations among ADHD patients from the Middle East to those from the West. Therefore, this study will be the base for other similar studies in the area. Also, the results will help ADHD patients to decide whether to take the medications or not.

BACKGROUND

Attention deficit hyperactivity disorder (ADHD) is a common childhood neurodevelopment disorder, which manifests as inattention, hyperactivity and impulsivity (American Psychiatric Association, 2013). The presentation of ADHD symptoms among adults differs from that in children, as they may experience a wide range of difficulties and impairments pertaining to their academic, occupational, and social functioning (Torgersen, Gjervan and Rasmussen, 2006). One of those areas is driving a vehicle. Past studies have shown that adults with ADHD have a higher risk for adverse driving outcomes, such as traffic violations and accidents (Barkley, Murphy, Dupaul and Bush, 2002).

RESULTS

- The study was conducted on twenty one patients. 66.7% (n=14) of patients were males. About 33.3% (n=7) of patients are in the age group between 18 and 25 years and 66.7%(n=14) are more than 25 years.
- 71.4% of males and 28.6% of females showed decrease in traffic offences. 70.4% of females and no males showed no change in number of traffic offences. There was increase in traffic offences in 19% of males.

Traffic offences after taking medications	gender	
	Female	Male
Decreased	2 28.6%	10 71.4%
Not changed	5 71.4%	0 0%
Increased	0 0%	4 19%

Table 1 Number of traffic offences after taking medications and gender

SUMMARY

- Most males showed decrease in number of traffic offences after taking ADHD medications, while most of females showed no change in the number.
- About half of the patients in both age groups showed decrease of traffic offences after taking medications.
- Patients are recommended to take ADHD medications if they want to avoid or reduce traffic offences.

MAIN REFERENCES

1. American Psychiatric Association. Diagnostic and statistical manual of mental disorders : DSM-5. 5th ed. Washington, D.C.: American Psychiatric Association; 2013. xlv, 947 p. doi: 10.1176/appi.books.9780890425596.
1. Torgersen, T., Gjervan, B., & Rasmussen, K. (2006). ADHD in adults: A study of clinical characteristics, impairment and comorbidity. *Nordic Journal of Psychiatry*, 60(1), 38–43. <https://doi.org/10.1080/08039480500520665>