Original Article

Alcoholism among male patients attending emergency units, Baghdad, Iraq

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Summary:

Background: The problem of excessive alcohol consumption is a major cause of public health concern in most countries of the world today. Royal Colleges of Physicians and Psychiatrists recommended that every inpatient should be screened with a questionnaire for alcohol related problems. Therefore, this work was carried out to report on alcoholism in the emergency unit in two general hospitals in Baghdad, Iraq.

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Methods: The study was carried out in Al-Sader general hospital (Al-Sader city, Baghdad) and Baghdad teaching hospital (Baghdad) for the period 1st July 2008 to 1st May 2009. Data collection was two days per week. Version of 25 items Michigan Alcoholism Screening Test (MAST) and semi-structured schedule based on Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV) criteria for alcohol dependence were used. Males aged 16 – 70 years attended emergency units were included in the study.

Results: There were 11% had alcoholism. Alcoholism was significantly associated with age > 40 years, married, low educated and employed (p= 0.02, 0.002, 0.03, respectively). Alcohol dependence was significantly associated with younger age (< 40 years), single, low educated, early onset of drinking (< 30 years) and positive family history of alcoholism (p=0.006, 0.004, 0.004, 0.004, 0.005, respectively). Sensitivity and positivity of MAST were 86.7% and 60.7%, respectively.

Conclusion: High prevalence of alcoholism was reported among attendents to emergency units.

Keyword: alcoholism, emergency unit, MAST, alcohol dependence, Baghdad, Iraq.

Introduction:

The problem of excessive alcohol consumption is a major cause of public health concern in most countries of the world today (1). Definition of alcoholism have been proposed by a range of professional and other bodies, from biomedical scientists, medical doctors, and psychiatrists, psychologists, sociologist and patients in treatment, to the general public (2). Although, alcohol abuse and dependency called alcoholism, the text revision of the fourth edition, Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) does not use the term because it lacks precise definition (3). The term remains in common use, however. Royal College of Physicians (4) and the Royal College of Psychiatrists (5) had recommended that every inpatients should be screened with a questionnaire for alcohol related problems. This work was carried out as a trial to report on alcoholism in the emergency unit in two general hospitals in Baghdad.

Materials and methods:

The study was carried out in Al-Sader general hospital and Baghdad Teaching hospital (Baghdad) for the period 1st July 2008 to 1st May 2009. The data collection was carried out two days per week. Version of 25- items Michigan Alcoholism Screening Test (6) (MAST) and a semi- structured interview schedule based on DSM-IV criteria for alcohol dependence (7) were used.

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The MAST assesses the lifetime prevalence of alcoholism. A score of 5 or more indicates probable alcohol dependence (8). Male patients age 16- 70 years attended emergency units in Al-Sader general hospital and Baghdad Teaching hospital were included in the study. The associations of dependent variables (alcohol drinkers and alcohol dependents) with independent variables (age, marital status, educational level, occupation, admission to hospital and family history of alcoholism) were done using chi-square, Yate's correction and Fischer's Exact probability tests. P value less than 0.05 was considered as significant.

Results:

Out of the total interviewed (264), there were 24 (11%) scored above the cut off of MAST, and 13 (54.2%) of them met the criteria of alcohol dependence. The semi- structured questionnaire revealed 15 (62.5%) had alcohol dependence. Fig.1 shows the age distribution of the patients with alcoholism. There were two peaks at 30 – 39 years and at 50 – 59 years. Alcoholism was significantly associated with age > 40, married, low educated and employed male (p= 0.02, 0.002, 0.03, respectively). Alcoholism was significantly common among those admitted to medical ward. These finding are shown in Table 1. Alcohol dependence was significantly associated withb younger age (< 40 years), single, low educational status, early onset of drinking (< 30 years of age) and a positive family history of alcoholism (p=

0.006, 0.004, 0.004, 0.004, 0.005, respectively) (Table 2). Sensitivity and spesificity of MAST were 86.7% and 60.7%, respectively.

Table 1: Variables associated with alcoholism

Variable		Alcoholism		No alcoholism		P value
		No.	%	N0.	%	
Age						
	<40	7	29.2	82	42.3	0.019
	>40	17	70.8	112	57.7	
Marital status						
	Single	1	4.2	58	29.9	0.0019
	Married	23	95.8	136	70.1	
Educational level						
	< secondary school	17	70.8	130	67.0	0.03
	>secondary school	7	292.	64	33.0	
Attending ward						
	Medicine	16	66.7	107	55.2	0.02
	Surgery	8	33.3	87	44.9	

Table 2: Some variables associated with alcohol dependence

Variable		Alcohol dependence				
		Positive		Negative		P value
		No.	%	No.	%	
Age						
	<40	5	33.3	2	22.2	0.006
	>40	10	66.7	7	77.8	
Marital status						
	Single	1	6.7	0	0.0	0.004
	Married	14	93.3	9	100.0	
Educational level						
	< secondary school	11	73.3	6	66.7	0.004
	> secondary school	4	26.7	3	33.3	
Age of starting alcohol drinking						
	<30	9	60.0	7	77.8	0.004
	>30	6	40.0	2	22.2	
Attending ward						
	Medicine	9	60.0	7	77.8	0.008
	Surgery	6	40.0	2	22.2	
Family history						
	Positive	2	13.3	2	22.2	0.005
	Negative	13	86.7	7	77.8	

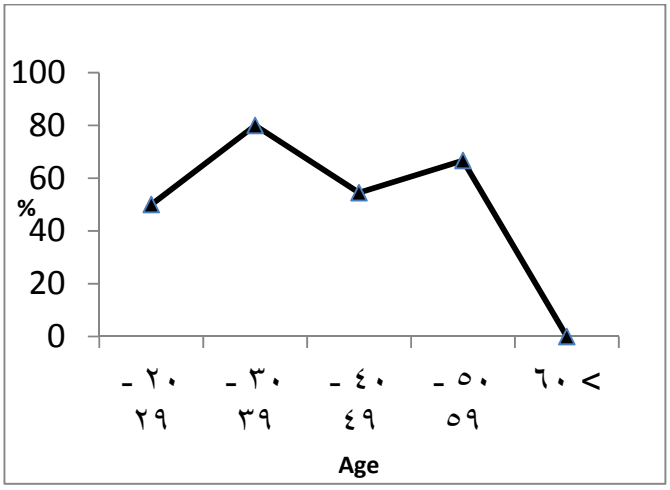

Fig. 1 Age distribution of alcoholism

Discussion:

The reported rate of alcoholism (11%) was higher than that reported in Basrah, Iraq, among attenders to hospitals (9). The study in Basrah, Iraq was conducted befor 2003 Gulf war which may contribute to this difference. Recently, Iraqi Mental Health Survey (IMHS) (10) reported a prevalence of 0.7% of alcoholism among general population in Iraq. Difference in scanning instrument (IMHS used Composite International Diagnostic Interview) and differences in sampling may contribute for this difference. The reported rate in this study (11%) was lower than that in Europe (2,3), USA (2,3,12) and Tukey. Alcoholism frequency varies according to samples, scanning method employed and culture. The study revealed that alcoholism was significantly higher among males aged > 40 years men. It is inconsistent with that of other studies (2,3). This finding may be attributted to high exposure to wars and widespread violence in the last 3 decades (13-15) which is in turn a risk factors for mental disorders (e.g. posttraumatic stress disorder, substance abuse, ..etc). Several workers (10,16-18) reported high prevalence of mental disorders e.g. posttraumatic stress disorder (PTSD) in Iraq. PTSD associates with substance abuse (19). In contrast to other studies (2,3,12), alcoholism was significantly higher among low educated men (< secondary sechool) and married. This difference could be attributted to social and cultural differences. Exposure to traumatic events, lack of recreation activities in Iraq in the last decades due to wars (13), sanctions and widespread violence (14,15) may contribute for this finding as high educated men may deal differently eith stress. Several workers demonstrates the positive association between exposure to wars and political violence (widespread violence and terrorist activities) with substance abuse (19). In the line of previous studies (2,3) , alcohol

dependence was associated with early onset of alcohol drinking and positive family history of alcoholism.

Alcohol dependence was significantly higher among those aged > 40 years of age, married and higher education. This finding is inaccordance with that of other worker (2,3). The difference could be attributted to cultural differences and exposure to wars and widespread violence. Sensitivity and specificity of MAST were 86.7% and 60.7%, respectively. This finding is in contrast to that in literature (6,8). Hearne et al reported a sensitivity of 37% and a specificity of 100%. This difference might be attributted to the translation of MAST to Arabic language. No epidemiologist was participating in the translation of MAST and no pilot study was conducted to examine the arabic translated MAST version, then no validity and reliability were determined for the arabic version.Up to my best knowledge, no report published on reliability and validity of Arabic MAST version. Feinn et al (20) demonstrated that the reliability of the psychiatric diagnoses obtained using structural interview varies considerably. They suggested that the greater source of unreliability was the subject's report, which underscores the need for effort to increase reliability of substance dependence diagnosis by enhancing the consistency of the information provided by the subjects interviewed. The arabic MAST may affect the information provided by the subjects interviewed.

Conclusion:

High prevalence of alcoholism was reported among patients attendenting to emergency units. Alcohol dependence was associated with age >40 years, low educated status, married males, early starting alcohol drinking and positive family history of alcohol dependence.

References:

1. Marshalt J. Alcohol dependence and alcohol problems. In: Gelder M, Andreasen N, Lopez-Ibor J, Geddes JR (editors). New Oxford Textbook of psychiatry, 2nd edition, Oxford Medical publication, Oxford, UK. 2010, p. 437.

2. Baber TF. Social, scientific and medical issues in the definition. In: Edward G, Lader M (editors). The nature of drug dependence. Oxford medical publication, Oxford, UK. 2002. P.= 19-36.

3. Sadock BJ, Sadock VA. Kaplan and Sadock's synopsis of psychiatry. Behavioral sciences / Clinical psychiatry. 10th edition. Lippincot Williams and Wilkins. London, UK. 2009. P= 391- 407.

4. Royal College of Physicians. A great and growing evil: the medical consequences of alcohol abuse, London, Tavistock, 1987.

5. Royal College of Psychiatrists. The psychological care of medical patients: recognition of need and service provision. London, Tavistock, 1995.

6. Shields AL, Howell RT, Potter JS, Weiss RD. The Michigan Alcoholism Screening Test and its shortened form: a meta-analytic inquiry into score reliability. Subt Use Misuse 2007; 42: 1783- 1800.

7. Zainy HH. The prevalence of personality disorders among alcohol dependence. Fellowship thesis, Iraqi Board of Medical Specialization. 1997

8. Saderstorm CA, Smith GS, Kufera JA et al. The accuracy of CAGE, the brief Michigan Alcoholism Screening Test and the Alcohol use disorders identification test in screening trauma center patients for alcoholism. J Trauma 1997; 43: 962-969.

9. Mossawe JF, Ali NA, Ahmed JH, Al-Naama LM. Clinical and biochemical profile users alcohol in Basrah. East Medtitr Health J 2009; 15: 1226-1234.

10. AlHasnawi S, Sadik S, Rasheed M et al. The prevalence and correlates of DSM-IV disorders in the Iraq Mental Health Survey (IHMS). World Psychiatry 2009; 8: 97-109.

11. SurveyCrum RM, Chan YF, Chin LS, StorrCL, anthony JC. Incidence rate for alcohol dependence among adults: prospective data from Baltimore Epidemiologic Catchment Area. Follow up survey 1981-1996. J Stud Alcohol 2005; 66: 795-805.

12. Hearne R, Conthony A, Sheehan J. Alcohol abuse: prevalence and detection in general population. J Roy Soc Med 2002; 95: 84-87.

13. Iraqi Family Health Service Survey Group. Violence related mortality in Iraq from 2002 to 2006. N Engl J Med 2008; 358:484- 493.

14. Burnham G, Lafta R, Doou S, Robert L. Mortality after 2003 invasion of Iraq: a cross- sectional cluster sample survey. http://www.thelancet.com. Published online Oct. 11. 2006.

15. Fearson JD. Iraq's civil war. Foreign Affairs 2007; 86: 2-16

16. Al-Hakeem SS. Prevalence and risk factors of posttraumatic stress disorder in Mosul city. A dissertation submitted to Iraqi Board of Medical Specialization. 2007.

17. Sabri RR. Prevalence of posttraumatic stress symptoms among internationally displaced people after 22nd Feb. 2006. A dissertation submitted to the Iraqi Board for medical specialization. 2008.

18. Al-Shawi AF, Al-Hemiary NJ, Al-Diwan JK, Al-Hadithi T. Post-truamatic stress disorder among university students: a preliminary report. J I B MS 2010 submitted for publication

19. Jaeobson IG, Ryan MA, Hooper TJ et al. Alcohol used and alcohol related problems before and after military combats deployment. JAMA 2008; 300: 663-675

20. Feinn R, Gelernter J, Cubells J, Farrer L, Kranzler H. Source of unreliability in the diagnosis of substance dependence. J Stud Alcohol Drugs 2009; 70: 475-481.