

EDUCATION SECTION

**MODEL ANSWER FOR CRITICAL REVIEW PAPER:
CONJOINT EXAMINATION FOR MALAYSIAN MASTER
OF MEDICINE (PSYCHIATRY) AND MASTER OF
PSYCHOLOGICAL MEDICINE MAY 2013**

Hazura H, Wan Norhaida WA**, Ruzita J***,
Zahiruddin O**, Hatta Sidi^, Marhani Midin^*








***Department of Psychiatry and Mental Health, Hospital Raja Perempuan Zainab II, 15000 Kota Bharu, Kelantan, Malaysia; **Department of Psychiatry, School of Medical Sciences, Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan, Malaysia; ***Department of Psychiatry and Mental Health, Hospital Tuanku Fauziah, 01000, Kangar, Perlis; ^Department of Psychiatry, Universiti Kebangsaan Malaysia Medical centre (UKMMC), 56000 Cheras, Kuala Lumpur, Malaysia.**

Abstract

Objective: This paper aims to discuss the answers to a Critical Review Paper used in the Malaysian Master of Medicine (Psychiatry) and Master of Psychological Medicine examination conducted in May 2013. **Methods:** One part of this broader postgraduate examination is to evaluate the students' skills of critical appraisal through answering questions based on a journal paper. **Results:** Model answers were provided at the end of the Critical Review Paper. The objective of the study presented in the review paper was to investigate the association of cigarette smoking with verbal working memory and psychopathology of patients with schizophrenia. **Conclusion:** This review paper had fairly evaluated the students' understanding and critical thinking on the given topic. This paper may serve as a guideline to teach students how to critically appraise research papers related to psychiatry. *ASEAN Journal of Psychiatry, Vol. 14 (2): July – December 2013: XX XX.*

TITLE OF PAPER: Verbal Working Memory in Schizophrenia: Relationship to Cigarette Smoking and Psychopathology, *Malaysian Journal of Psychiatry. 2012; 21(1):151-157*

**CONJOINT MASTER OF PSYCHOLOGICAL MEDICINE / MASTER OF MEDICINE
(PSYCHIATRY) CRITICAL REVIEW QUESTION**

						
UKM	UM	USM	UiTM	UPM	MOH	ACADMED

Date: Thursday, 2nd May 2013

Time: 10:30 a.m. – 12:30 p.m.

INSTRUCTIONS TO CANDIDATES

Please answer ALL questions in your answer sheet in the given space. No question paper shall be removed from the Examination Hall.

Summary of Study

The objective of the study is to investigate the association of cigarette smoking with verbal working memory and psychopathology of patients with schizophrenia.

Methods

Subject

This is a cross sectional study on 30 smokers and 23 non-smokers with schizophrenia between the ages 15 and 65 inclusive. Subjects were grouped into smoker if they smoke > 20 cigarettes per day and non-smoker if they do not smoke or smoke less than 5 cigarettes for the previous 6 months.

Subjects were recruited from the outpatient and inpatient of Hospital Universiti Sains Malaysia (HUSM) as they came and consented to the study within a six-month period (1st July 2011 till 31st December 2011). Patients were excluded if they have mental retardation, neurological or significant medical problems; current or past histories of substance abuse other than nicotine, or were regularly prescribed with anticholinergic medication such as benzhexol. A single researcher did the assessment with the Malay Version of Auditory Verbal Learning Test (MVAULT) which is a translated and validated Malay version of the Rey Auditory Verbal Learning Test, developed to suit the Malaysian population. The patients were also assessed with the Positive and Negative Syndrome Scale (PANSS).

Results

Table 1. Socio-Demographic and Clinical Characteristics of the Sample (n=53)

		Smokers	Non-smokers	Z*	p-value [†]
		(n=30)	(n=23)		
		Frequency (%)	Frequency (%)		
Gender	Male	27 (90)	9 (39)		<0.010
	Female	3 (10)	14 (61)		
Ethnic	Malay	29 (97)	23 (100)		0.566
	Others	1 (3)	0 (0)		
Marital status	Married	7 (23)	4 (17)		0.543
	Single	15 (50)	15 (65)		
Employment status	Divorced	8 (26)	4 (17)		0.460
	Full time	1 (3)	2 (8)		
	Part time	12 (40)	6 (26)		
Educational level	Unemploye d	17 (57)	15 (66)		0.051
	Tertiary	0 (0)	1 (4)		
	Secondary	29 (97)	17 (74)		
	Primary	1 (3)	5 (22)		
Type of antipsychotics	Atypical only	14 (47)	10 (43)		0.460
	Typical Only	4 (13)	1 (4)		
	Combinatio n	12 (40)	12 (52)		
		Median (IQR)	Median (IQR)		
Age (year)		35.5 (8.0)	38.7(8.0)	-1.92	0.542
Age at first treatment (year)		21.5 (11)	20 (10)	-0.70	0.481
Duration since first treatment (year)		12.5 (16)	17 (10)	-1.21	0.230
Number of ward admission		5 (8)	6 (9)	-1.69	0.493

*Mann-Whitney test.

[†] Chi-Square test, P<0.05 as significant at 95% CI.

Questions (Total 20 marks)

1. State the study design and the sampling method used. (2 marks)

Answer:

*Study design: a cross-sectional study
Non-random convenient sampling*

2. State 2 limitations of such sampling method. (2 marks)

Answer:

(i) Biased to samples that are cooperative and willing and thus giving results that are not representative of the subject being studied (sampling bias).

(ii) Cannot generalize to the general population

3. Comment on the sample size of this study. (1 mark)

Answer:

No sample size estimation, or the sample size is obviously too small.

4. State three (3) parameters needed for calculation of sample size for a study like this. (3 marks)

Answer:

The probability level or α , the effect size and the desired power

5. State the research question of the study. (2 marks)

Answer:

Is smoking influence verbal working memory among patients with schizophrenia?

6. State four (4) independent variables in the study. (4 marks)

Answer:

*Dependent variable = verbal working memory
Independent variables = Age, gender, duration of illness, smoking status, ward admission, type of antipsychotics, PANSS score etc.*

7. Based on Table 1, comment on the comparativeness of the smoking and non-smoking groups. (2 marks)

Answer:

The study samples are not comparable. The most obvious is that researcher failed to match the control especially the gender, where the percentages of male subjects and control were 90% and 39% respectively.

8. How does your explanation in Question 7 affect the outcome of the study? (2 marks)

Answer:

Gender may influence verbal working memory. This further weakens the attempt at finding the significant association of working memory and cigarette smoking in patients with schizophrenia.

9. Suggest a suitable statistical test to be used in this study, if you were to do a regression model. (2 marks)

Answer:

ANCOVA : Analysis of covariance.

Corresponding author: Hatta Sidi, Professor of Psychiatry and Lecturer, Department of Psychiatry, Universiti Kebangsaan Malaysia Medical Centre (UKMMC), 56000 Kuala Lumpur, Cheras, Malaysia.

Email: hattasidi@hotmail.com

Received: 10 May 2013

Accepted: 7 June 2013