

# PSYCHONEUROTIC PROFILES OF UNIVERSITI KEBANGSAAN MALAYSIA MEDICAL STUDENTS

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## SUMMARY

*The Middlesex Hospital Questionnaire (later known as The Crown – Crisp Experiential Index) was used on medical students of the Universiti Kebangsaan Malaysia, Kuala Lumpur. It was found that Year II medical students scored the highest; the female students scored higher than male students in all classes. The female students were more anxious, phobic, obsessional, hypochondriacal and depressive than male students.*

## INTRODUCTION

The Middlesex Hospital Questionnaire (MHQ) (later known as The Crown-Crisp Experiential Index – CCEI) was described by Crown and Crisp in 1966.<sup>1</sup> MHQ measures six categories of neurotic symptoms and traits: Free floating anxiety (FFA); Phobic Anxiety (PHO); Obsessive compulsive traits and symptoms (OBS); Somatic symptoms (SOM); Depression (DEP); Hysterical traits (HYS).

The general validity studies have been done on MHQ and generally, it is found that MHQ subscales can differentiate between normal subjects and neurotic patients.<sup>1,2</sup> The MHQ can measure neurotic traits and it has been used to measure the change of symptomatology of neurotic patients during treatment.<sup>3</sup> It has been used in more than one culture and language.<sup>4-7</sup>

There are studies on the mental health and psychiatric morbidity among medical students using different assessment methods.<sup>8-10</sup> Psychiatric symptomatology survey has been done on Australian medical students using the Cornell Medical Index (CMI) and Form B of the Eysenck Personality Inventory (EPI).<sup>11</sup> There are also reports on the use of the Minnesota Multiphasic Personality Inventory (MMPI) on medical students.<sup>12,13</sup> But the use of MHQ to assess the psychoneurotic profiles of medical students was rarely reported.<sup>7</sup>

Personality profiles of Universiti Kebangsaan Malaysia medical students have been done using MMPI.<sup>13</sup> The MHQ has not been translated into the Malay language and its use has not been reported in Malaysia.

The aims of this study were: to report the MHQ psychoneurotic profiles of Universiti Kebangsaan Malaysia's medical students – this information would be useful for future mental health programme of students; to use the medical

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students as a control group in standardization of the Malay language-translated MHQ.

## MATERIALS AND METHOD

The MHQ (CCEI) was translated into the local language, Bahasa Malaysia, from English by two Malaysian psychiatrists of Malay origin. The translated version was also re-translated into English by a Malay clinical psychologist. The final form of the translated questionnaire was shown to other staff members to ensure easy comprehension and to eliminate possibilities of 'double' meaning before being put into use.

The Medical Faculty of Universiti Kebangsaan Malaysia (UKM) conducts a six-year medical course. Its first year course is conducted at the main campus situated in Bangi, a new town about 50 km away from Kuala Lumpur city. The rest of the medical courses are held within the Medical Faculty based in Kuala Lumpur.

Four classes were selected for the study. There were 180 students in year II, 174 students in year III, 164 students in year IV and 154 students in year V. A random sample of students in years II, III, IV, V of the academic year 1984/85 were selected. Year I students were omitted from the study because of the different location, and year VI students were not included in the study as they were busy preparing for their final examinations.

The students were told about the purpose of the study and were asked to answer the questions

spontaneously and truthfully. The students were allowed to remain anonymous while filling up the questionnaire, but they were required to fill in their sex, age and the year of medical course.

## RESULTS

Table I shows the total number of students of both sexes in each class, and the total number and percentages of students responding to the questionnaire. Since more than 40% of the students were screened randomly, it can be argued that our sample reflects the total medical students population.

Table II shows the means and standard deviations of the total scores on MHQ by the students classified according to class and sex. It was found that year II students scored significantly higher than the students of other classes for both sexes. A comparison between year II male students with those of other years showed that there was no significant difference between year II and year III, but year II students scored significantly higher than years IV and V students ( $P < 0.0005$ ). In the case of female students, year II students scored significantly higher than year III ( $P < 0.005$ ), year IV ( $P < 0.025$ ) and year V students ( $P < 0.0005$ ).

There was a tendency for lower total neurotic scores in more senior class students. In all the classes except for year V, female students scored significantly higher than male students (at year II,  $p < 0.0005$ ; year III,  $p < 0.01$ ; year IV,  $p <$

TABLE I  
CLASS POPULATION AND PERCENTAGE OF THOSE SCREENED ACCORDING TO SEX

Classes	Number of males			Number of females		
	Total	No. screened	(%)	Total	No. screened	(%)
Year II	70	62	88.6	110	96	87.3
Year III	80	42	52.5	94	41	43.6
Year IV	98	48	49.0	66	46	69.7
Year V	89	79	80.8	65	52	80.0

**TABLE II**  
**MHQ TOTAL SCORE MEANS AND STANDARD DEVIATIONS ACCORDING TO CLASS AND SEX**

Score	Male				Female			
	Year II	Year III	Year IV	Year V	Year II	Year III	Year IV	Year V
Mean	32.02	30.86	24.31 <sup>***</sup>	26.56 <sup>***</sup>	39.76	35.93 <sup>**</sup>	35.83 <sup>*</sup>	27.52 <sup>***</sup>
Standard Deviation (±)	8.51	10.41	13.33	10.07	9.81	8.81	11.59	9.91

\* P < 0.025; \*\* P < 0.005; \*\*\* P < 0.0005.

0.0005). The overall picture thus showed that the year II female students have high neurotic tendencies in this study.

Table III shows the means and standard deviations of the scores on MHQ subscales according

to class and sex. The significant level of differences on the various subscales between sexes in year II and year V was calculated.

It was found that year II female students have significantly higher scores than male students on

**TABLE III**  
**MEANS AND STANDARD DEVIATIONS OF THE SCORES ON MHQ SUBSCALES ACCORDING TO CLASS AND SEX**

Sub-Scales*		Year II		Year III		Year IV		Year V	
		Male	Female	Male	Female	Male	Female	Male	Female
FFA	M	4.92	6.33	4.98	6.89	4.92	5.98	4.25	4.42
	SD	2.59	2.95	2.75	3.23	2.39	3.01	2.51	2.60
PHO	M	5.40	8.27	4.88	7.82	5.38	7.19	5.16	6.00
	SD	5.25	2.63	2.47	2.67	2.74	2.94	2.33	2.99
OBS	M	6.92	7.88	6.21	7.09	6.42	6.67	5.87	5.73
	SD	2.54	2.42	3.01	2.84	2.11	2.95	2.47	2.94
SOM	M	4.27	6.38	4.21	6.01	4.14	5.59	3.01	2.92
	SD	2.54	2.73	2.14	3.37	2.01	2.53	2.04	1.99
DEP	M	4.89	6.79	4.17	4.99	4.46	5.50	3.84	4.19
	SD	2.42	2.32	2.46	2.52	2.81	2.57	2.43	2.18
HYS	M	4.85	4.69	5.17	5.23	4.82	5.05	3.94	3.88
	SD	2.75	2.80	3.11	2.98	2.69	2.98	3.12	3.03

\* FFA-Free floating anxiety; PHO-Phobic anxiety; OBS-Obsessive compulsive traits and symptoms; SOM-Somatic symptoms; DEP-Depression; HYS-Hysterical traits.

the following subscales: phobia  $t = 6.98$ ; depression  $t = 5.41$ ; somatic symptoms  $t = 4.79$ ; free floating anxiety  $t = 3.06$ ; obsession  $t = 2.18$ . There was no significant difference on hysteria subscales although male students scored slightly higher.

In year V, the differences of subscale scores between male and female students were found to be non-significant.

## DISCUSSION

As expected, the means of the total MHQ score in our sample were lower than that of neurotic populations.<sup>6</sup> But it was comparable to the scores of the Iraqi medical students.<sup>7</sup>

The high neurotic symptom scores in year II medical students were reported in other studies using CCEI<sup>7</sup> and using Eysenck Personality Inventory and Cornell Medical Index.<sup>11</sup> Our study supports these findings. The reasons may be many, but some of these are: First year of jubilation and contentment of having succeeded to enter the medical course is behind and students come to grip with the sheer reality of facing longer years and harder work than their colleagues in other colleges; Change of place and environment from the new town Bangi Campus to centre of Kuala Lumpur area; Conflicts between their previous social values and requirements of medical ethics and practices.

Female students were generally more anxious, phobic, obsessional, hypochondriacal and depressive than male students in all classes except in year V. But the hysteria subscale score showed no significant differences between different classes and between sexes in each class. This finding supports the other studies.<sup>6</sup> As suggested by Cockett (1969),<sup>14</sup> it might measure extraverted personality trait rather than hysteria.

It was quite interesting to note that our medical students scored far less than English medical

students on hysteria subscale. This could possibly be due to different cultural factors or be due to the fact that our medical students are less extraverted than the English medical students.

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