

The Problem Student on Clinical Rotations: A Comparison of Malaysian and North American Views

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Summary

The purpose of this study is to explore the types of problem students that clinical teachers encounter in clinical settings. A questionnaire developed by the Association of American Medical Colleges that lists a variety of types of problem students was completed by 466 clinicians at the University of Washington School of Medicine (UWSOM) and 98 Malaysian clinicians from Universiti Kebangsaan Malaysia (UKM) and Universiti Sains Malaysia (USM). In addition, 120 medical students from UKM completed a slightly modified version of this questionnaire. Both the faculty and student questionnaires asked the respondent to identify the frequency of a given problem type. The faculty was also asked to estimate how difficult it was to evaluate a specific problem.

In general, there was strong agreement among the North American and Malaysian faculty on the frequency and difficulty of the 24 types of problem students listed. There were some notable differences, such as Malaysian teachers perceiving the "shy" student more frequently than their North American counterparts who rated the student with deficits in knowledge more frequently. However, the overall similarity in the rankings suggest that clinical teachers face similar types of problems, independent of cultural differences and institutional differences.

Key Words: Clinical education, Medical students, Problem students, Communication, Clinical evaluation

Introduction

Teaching in the clinical setting can lead to a type of isolation that prevents the early recognition of a problem student¹. Over the past 12 years the Association of American Medical Colleges (AAMC) has examined clinical evaluation systems in North

American medical schools to identify breakdowns in communication that prevent remediation or dismissal of students unfit to practice medicine²⁻⁴.

This Clinical Evaluation Project (CEP) initiated by the AAMC initially worked with eight North

American medical schools to identify problem areas in evaluation and communicating information about students in clinical settings. During this phase of the project 21 types of problem students were identified. A questionnaire was then developed to determine lecturer perceptions of frequency and the difficulty in evaluating or managing each of these problem types. An analysis of the data from the University of Washington School of Medicine (UWSOM) identified four categories of problem students based on frequency and difficulty assessments⁵. A study by Metheny and Carline⁶ compared the lecturer frequency ranking of these 21 student problems to the ranking made by medical students of the Medical College of Georgia. Metheny and Carline reported that the student and clinical rankings correlated strongly on the perception of frequency. Discrepancies between the clinician and student rankings suggest that North American students emphasise interpersonal relationships and work habits, whereas the North American teachers focused more on cognitive skills when defining the problem student.

The purpose of this study was to utilise a modified form of the AAMC questionnaire with medical school lecturers and students in Malaysia to determine how many of these observations are valid across national boundaries. The hypothesis in this study was that despite cultural, educational, and institutional differences, certain types of problem students are uniformly a challenge.

Methods

Questionnaire: The questionnaire utilised in the North American studies listed 21 problem students each with a brief one sentence description. The questionnaire asked lecturers to assess how frequently they saw a particular problem ("frequently", "occasionally" or "rarely") and how difficult the assessment or evaluation was of that particular type of problem student. For Universiti Kebangsaan Malaysia (UKM) and Universiti Sains Malaysia (USM) lecturers and students, three additional student descriptions were added. These three were: "students with poor command of their patients' language", "students with poor command of English", and "students who have problems with the patient due to differing values". In addition, minor modifications

in descriptions were carried out such as adding the words "...student who cannot solve problems" to the problem type of "poor integration skills" and adding the word "psychological" to the "student with psychiatric problems". The lecturer questionnaire also asked for the respondent's clinical department, faculty or resident status. It asked faculty to indicate whether they had been a clinical teacher for less than or greater than five years. For UKM students, rather than asking how difficult a problem would be to evaluate, this aspect of the questionnaire was modified to inquire how serious a given problem was relative to the future practice patterns of the given problem. However, the first half of the questionnaire that dealt with the perception of frequency of a given problem was identical to the questionnaire given to the lecturers.

Subjects: The questionnaire was completed by 98 lecturers and resident physicians who had direct contact with clinical students. Of this total, 54% were affiliated with UKM and 46% were affiliated with USM. Response rates varied across departments with psychiatrists providing a higher percentage of responses compared to their relative presence in each school. In addition, 120 students from UKM completed the questionnaire with 80% in their fourth year, 40% in their fifth year; 47% female, 46% male. Seven per cent of the students did not identify gender. The comparison sample collected at the UWSOM was completed by 466 clinical teachers. They represented a broad range of disciplines: Medicine (177) Paediatrics (118), Ob-Gyn (73), Psychiatry (57) and Surgery (41).

Statistical Analysis: To determine whether one rank ordering was significantly different from another, the Spearman Rank Correlation Test was used. This is a measure of disarray that takes into account when paired ranks are in the same, inverse or random order. The coefficient can change from -1 to 1 with 1 indicating the exact same rank order between pairs and -1 indicating the inverse order.

Results

The lecturers from UKM and USM medical schools rank ordered the frequency and relative difficulty of dealing with problem students in a very similar fashion.

Their responses were combined. Table I lists the rankings on the frequency of encountering problems by UKM/USM and UWSOM lecturers. To allow tests of similarity using a Spearman Rank Correlation test across the two groups, the three unique student problems on the UKM and USM questionnaire (language and values) are listed in parenthesis in the order they were listed by these Malaysian clinicians. No rank number is given for this to allow comparisons to the North American responses which did not have those problem types on their questionnaires. The Spearman Rank Correlation between the UWSOM teachers and the UKM and USM lecturers was very strong; 864 ($P < .001$).

Within the UKM and USM lecturers, those with greater than five year's experience ranked the disinterested student higher in frequency than lecturers with less clinical teaching experience ($P < .05$). The more junior lecturers ranked the "student who challenges everything" as more frequent ($P < .05$) than the more senior clinicians. The psychiatry lecturers and residents rated the frequency of observing psychological problems higher ($P < .01$) than other departments. The UWSOM psychiatrists also rated psychological problems higher than other UWSOM respondents. It should also be noted that there was a higher relative percentage of psychiatric lecturers in the UKM and USM who

Table I
Comparison of University of Washington School of Medicine and Malaysian clinicians ranking of the frequency of encountering 21 types of problem students in clerkship settings

Type of problem student	Malaysian clinicians (n=98)	UWSOM clinicians (n=466)
Excessively shy, non-assertive	1 ^a	5
Cannot focus on what is important	2	1
Poor integration skills, problem solving	3	4
Has poor fund of knowledge (poor fund of English language)	4	3
Overeager (poor grasp of patients' language)	5	6
Disorganised	6	2
Does not measure up intellectually	7 ^a	12
Bright but poor interpersonal skills	8	7
Disinterested	9	9
Avoids work	10	10
Too casual and informal	11	8
Avoids patient contact	12	14
Does not show up	13 ^a	18
"All thumbs"	14	13
Cannot be trusted	15	16
Rude (Different values from patient)	16	19
Psychological problem	17	20
Challenges everything	18 ^a	11
Hostile	19	17
"Con artist" (manipulative)	20 ^a	15
Substance abuse problem	21	21

a = discrepancy of four ranks or more between Malaysian and UWSOM clinicians

completed the questionnaires. This may account for the somewhat higher frequency ranking of this problem compared to the UWSOM counterparts.

Table II utilised the average frequency and difficulty for all student types for UKM and USM lecturers to display four categorical types. This data is broken down into four categories with *frequent* and *difficult* as type 1, *frequent* and *not difficult* as type 2, *not frequent* and *difficult* as type 3, and *not frequent* and *not difficult* as type 4. This analysis identified several differences from the North American clinicians' grouping of students⁵ into the four category types beyond the addition of the three UKM and USM-specific problems. Where UKM and USM clinicians ranked the student who cannot focus on what is important as a Type 1 category (*frequent* and *difficult*), the North American clinicians had that as a Type 2 category (*frequent* and *not difficult*). UKM and USM clinicians rated the student who avoids work and the student who avoids patients in the Type 3 category (*not frequent* and *difficult*), whereas both of these were Type 4 categories (*not frequent* and *not difficult*) for North American lecturers.

Table III compares the frequency rankings of the UKM and USM lecturers to the UKM students. Again, the similarity of ranking was strong with a Spearman Rank correlation coefficient of .883 ($P < .001$). The second aspect of the questionnaire asked students to rate how serious a given problem might be for future practice as a physician. While by and large most UKM students rated all of the problem types as potential problems in future practice settings, there were some notable differences between the fourth and fifth year students. The fourth year students who generally have not had much clinical exposure underestimated ($P < .01$) the seriousness of eight problem types compared to their fifth year classmates. The younger students underestimated the degree of seriousness of the overeager, disinterested, casual, no patient language, "all thumbs", manipulative and challenging student. The fifth year UKM students, with clinical experience, consistently ranked these problem types as likely to be more of a problem for future practice patterns. Relatively few differences between males and females were evident although the female students did rank differing values and problems with a patient's language at a higher ranking of frequency than did their male classmates ($P < .01$).

Table II
Frequency and difficulty categories of problem students for Malaysian faculty

Type 1: Frequent & difficult	Type 2: Frequent & not difficult
Shy Bright with poor interpersonal skills Poor command of the patients' language Poor command of English language Cannot focus on what is important	Overeager Poor integration, problem solving skills Disorganised Does not measure up intellectually Poor fund of knowledge
Type 3: Not frequent & difficult	Type 4: Not frequent & not difficult
Differing values from patient "Con artist" Cannot be trusted Avoids work Avoids patients Substance abuse problem Psychological problem	Hostile Rude Casual Does not show up "All thumbs" Challenges everything Disinterested

Table III
Comparison of Malaysian clinicians and Malaysian students' rankings of the frequency of encountering 24 types of problem students in clerkship settings

Type of problem student	Malaysian clinicians (n=98)	Malaysian students (UKM) (n=120)
Excessively shy, non-assertive	1 ^a	8
Cannot focus on what is important	2 ^a	6
Poor integration skills, problem solving	3	5
Has poor fund of knowledge	4	1
(Poor fund of English language)	5	2
Overeager	6 ^a	11
(Poor grasp of patients' language)	7	4
Disorganised	8	9
Does not measure up intellectually	9	7
Bright but poor interpersonal skills	10 ^a	3
Disinterested	11	12
Avoids work	12	10
Too casual and informal	13	13
Avoids patient contact	14 ^a	18
Does not show up	15	14
"All thumbs"	16	19
Cannot be trusted	17	20
Rude	18	16
Different values from patient	19	17
Psychological problem	20	23
Challenges everything	21 ^a	15
Hostile	22	21
"Con artist" (manipulative)	23	22
Substance abuse problem	24	24

a = discrepancy of four ranks or more between clinicians and students

Discussion

This survey does not attempt to quantify the actual frequency of student problems encountered in clinical settings. Reported here is the *subjective perception* of UKM, USM and UWSOM lecturers and UKM students of frequency with which they encounter a given student problem type. In fact, because people might tend to remember a specific problem student more vividly than the average good student, the difficulty of a problem may well influence the perception of frequency. Also it is important to keep in mind that this study is based on the perception of when a student type is a problem. This may reflect

more of a clash of teacher expectations with student performance than actual problems. The student who "challenges everything" or is "too shy" may not end up being any less of a fine physician but they do appear to give the clinical teacher more of a challenge with the teaching task. In spite of these limitations, the consensus across disciplines, institutions, and across cultures is impressive. In general, there is a very strong agreement between UWSOM, UKM and USM clinicians on the frequency and difficulty in managing the 21 student problems. Similarly, there is a general agreement between UKM and USM clinicians and UKM students.

There are differences that do identify specific areas that are unique and may help identify areas where workshops could assist faculty in working with certain types of students. The UKM and USM lecturers rank the excessively shy student more frequently than North American clinicians. Each rank this problem type as difficult to assess and to work with but it is perceived as more frequent in the UKM and USM setting. In contrast, the North American clinicians rank the student who challenges everything as more frequent than their Malaysian counterparts. This may reflect the opposite end of a continuum of student assertiveness. The language issues in the Malaysian schools is understandably more of a problem than in North America. With its multi-ethnic population it is not surprising that command of the English language and problems with the patients' language rate fifth and seventh in Malaysia but are not identified as an issue in the one language culture of North America. Thus while the general agreement across these cultures is impressively high, specific areas of difference do exist and can help each of the medical schools develop targeted training programmes.

The comparison of the student and faculty rankings is interesting. The students greatly underestimate the faculty perception of the frequency of the shy student. Whereas the faculty identify shyness, inability to focus, and poor problem solving skills as their highest ranking, the students rank poor fund of knowledge, deficiency in the English language and interpersonal skill problems more highly. The study by Metheny and Carline⁶ that lists the perceptions of frequency of medical students in the Medical School of Georgia in the USA provides another base of comparison. Malaysian students rank the student with a poor fund of knowledge much higher (number 1 rank) than the students from Georgia (number 12 rank).

It is reassuring that all clinicians and students rank problems such as substance abuse, psychological problems, hostility, rudeness and manipulative behaviour as relatively rare encounters. While uniformly rated as difficult to deal with, these problem types are fortunately infrequently encountered. Similarly, Type 2 problems (*frequent and not difficult*) seem to be those types of students who are just part of the challenge of teaching that Malaysian and American lecturers are

comfortable dealing with. These students are seen and dealt with frequently enough that clinical teachers appear to have adequate teaching strategies available. It is the Type 1 student (*frequent and difficult*) that attention needs to be focused on. Clinicians tell us that these are the students they see relatively frequently and have difficulty in evaluating and assessing. While there are no simple answers to these problem types, it may be beneficial to design clinical teaching workshops to help faculty recognise this problem early and develop approaches to work with these students. Within these workshops, some attention could be given to "diagnosing" the degree of problem.

For example, there will likely be students with language skills so inadequate or shyness so pronounced that the clinical teacher should not attempt to work with them. The workshop could help the clinician to recognise and decide when to refer the deficit (be it language, shyness, etc.) to a more central group to work with the problem more efficiently, or, if less severe of a problem, to continue working with the students in the patient care setting. For students whose shyness or language problems are serious but not overwhelming, various strategies of how to maximise that student's progress in the clinical setting could be explored. The faculty could be trained to help the less severe problem student. One workshop design that would be interesting could draw upon what has been learned in using standardised patients to teach students. Here "standardised students" could be used to train clinicians. That is, a group of students or actors could be trained to role play the characteristics that make the shy student, or the bright student with poor interpersonal skills difficult to work with. Faculty could use these "standardised students" in the workshops to learn techniques of giving feedback to enhance these students' performances.

Other important strategies would include the development of an efficient and effective Mentor System⁹. This needs to be initiated early in the course of medical education in order to provide faculty and students the opportunity to interact, to enhance role modeling of a proper medical practitioner profile, and to give early counselling to students with problems. Lastly, it is perhaps a bit too late to concentrate on fourth and fifth year students for

remediation. Proper student selection techniques as well as an earlier exposure to patients in the hospitals may

help overcome some of these problems or identify them earlier for remediation.

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