# EXIT EVALUATION OF THE MBBS PROGRAM FROM THE FINAL YEAR 5 STUDENTS' PERSPECTIVES AT A PRIVATE MEDICAL COLLEGE IN MALAYSIA

Soe- Soe- Aye

Professor and Head, Paediatric Unit, Asia Metropolitan University MALAYSIA

profsoe14@gmail.com

Amaluddin Ahmad

Dean, Faculty of Medicine, Asia Metropolitan University MALAYSIA

dramaluddin@amu.edu,my

Jegathambigai Ramashwar

Dep Dean (Pre- clinical), Asia Metropolitan University

MALAYSIA

jegathambigai@amu.edu.my

#### **ABSTRACT**

An exit evaluation study was done just prior to the completion of the third batch of the MBBS program at a private medical college in Malaysia.

**OBJECTIVES:** To determine (1) the program had enabled the students (a) to attain the eight Program Learning outcomes (b) To achieve the competencies in eight major areas expected upon completion of the program (2) The strengths in the program from the Final year 5 students' perspectives.

**METHODOLOGY:**A descriptive study was done at a Clinical Centre. The students who registered were Year 5 students doing Senior clerkship posting. A total of 18 students were included for the study. A Questionnaire including 1 open ended question (pretested for Reliability Cronbach's alpha 0 .944.) and self - administered was used for the study (Likert's scale of 1=SD;2=D; 3=Neutral;4-A; 5=SA;).Informed Consent was obtained from the participants, after principal investigator had explained the purpose and need of the study and assured them of confidentiality regarding their identity). Data gathered were analyzed by using SPSS version 23.

**FINDINGS:** Majority (>70%) of the students who participated feel that the program had enabled them to attain all of the eight Program Learning Outcomes;77% said they had acquired the necessary knowledge, skills and attitude required to achieve the intended competencies while 60-78% achieved competencies in each one of the eight major areas expected at end of course. The strengths included experienced lecturers, smooth implementation of the program and a well-designed curriculum.

**CONCLUSION**: Majority of the students attained all of the eight Program learning Outcomes and achieved competencies in each one of the eight major areas expected at end of Program. The strengths were identified and discussed. The study has paved the way for a more detailed in-depth study in the future.

**RECOMMENDATIONS:** Best practices in education that currently are existing can be used to further move toward an enhanced MBBS Program. Further evaluation studies can be done to answer more in-depth questions about program and to modify any aspects if required.

**Keywords:** Exit evaluation; Undergraduate medical education Program.

#### INTRODUCTION

Program evaluation is an essential responsibility for anyone overseeing a medical education program (Frye AW & Hemmer PA 2012). Educational programs are fundamentally about change; program evaluation should be designed to determine whether change has occurred. (Frye AW, 2012).

A strong program evaluation process supports accountability while allowing educators to gain useful knowledge about their program and sustain ongoing program development (Goldie 2006).

The process of educational program evaluation is the "systematic collection and analysis of information related to the design, implementation and outcomes of a program, for the purpose of monitoring and improving the quality and effectiveness of the program (ACGME 2010a)

This study was done just prior to the completion of the third batch of the MBBS program at a Medical University in Malaysia. The decision to make this evaluation was to get the feedback information that will guide the program's continuing development. In that way, it is felt that the program evaluation becomes an integral part of the educational change process.

## **OBJECTIVES** of the study are to determine

- (1) The program enabled the students (a) to attain the eight Program learning outcomes (b) to achieve the eight competencies expected on completion of the course.
- (2) The strengths in the Program from the Final year 5 students' perspectives.

#### **METHODOLOGY**

**DESIGN** of the study: Cross sectional. Descriptive study

**STUDY POPULATION**: All the students registered in Year 5 (Academic session 2017/2018) is 18.

## **STUDY MEASUREMENT:**

# A self-administered questionnaire was used for the study.

The Questionnaire had been pretested for face validity and reliability on 20 students registered to the year 5 Junior clerkship posting Cronbach's alpha based on standardized items 0 .944

Each of the students had been given a Study form consisting of a Questionnaire and 1 open ended question. The Questionnaire is to be filled in according to Likert's Scale (1 = SD; 2 = D; 3 = Neutral; 4 = A; 5 = SA; ) (1 = Strongly disagree and 5 = Strongly agree). The time was set as 30 minutes for completing the Study form

**VENUE** of the study: Clinical Centre of the University

**WRITTEN CONSENT:** The principal investigator had explained the purpose of the study and how the students have to fill in the Questionnaire and answer the 1 open ended question. Then the respondent's signature had been taken. The students had been assured of confidentiality of their identity.

#### **FINDINGS**

# Table 1. The number & percentage of students in line with the Vision of the MBBS Program (n=18)

Table 2. The number & percentage of students in line with the Mission of the MBBS

ITEM	AGREEMENT	
	No	%
1.My experience at this University had made me become the inspiration	7	38.9
for those with an aspiration in the healing sciences to excel in our		
knowledge through evidence based medicine in line with the Vision of		
the University.		

Program (n=18)

ITEM		AGREEMENT	
	No	%	
2.My experience at this University had instilled in me to achieve the	16	88.9	
mission of the Faculty and become a generation of doctors with			
knowledge, skills and holistic attitude regardless of race, gender, religion			
or economic standings			

Table 3. The number and percentage of students having achieved the Program Learning Outcomes, PLO 1 till PLO 8. (n= 18)

ITEM	<b>AGREEMENT</b>	
	Number	%
1.The curriculum had provided me with sufficient	14	77.8
information on essential and up to date medical		
knowledge		
2.The curriculum had provided me with the competency	13	72.3
in clinical skills to obtain a complete patient history,		
perform a complete examination and perform procedures		
needed for effective patient care		
3. The curriculum had provided me with skills and ability	15	83.3
to develop professional relationships with patients and		
their families.		
4. The curriculum had prepared me with ability to make	14	77.8
sound ethical decision needed in present and future		
patient care situations.		
5. The curriculum had provided me with ability to	16	88.9
communicate effectively with patients and other		
professionals regardless of age, race or religion		
6. The curriculum had provided me with ability to	15	83.3
critically and continuously reflect on my self-		
performance and become life- long learning person		

7.The curriculum had provided me with ability to reason	14	77.8
deductively in solving clinical problems		
8. The curriculum had prepared me with ability to	15	83.4
understand the various approaches to organizing,		
financing and delivery of health care needed for present		
and future		

Table 4. The number & percentage of students who had acquired knowledge, skills and attitude in order to achieve the eight competencies expected at end of the MBBS program (n=18)

ITEM	AGREEMENT	
	No	%
3.In my opinion, the MBBS programme had provided me to acquire knowledge, skills and attitude in order to achieve the 8 competencies as stated in the Program Learning Outcomes.	14	77.8

Table 5. The number and percentage of students who had acquired the expected competencies in eight major areas, on completion of the 5-year MBBS Program (n- (18)

ITEM	<b>AGREEMENT</b>	
	Number	%
1.In my opinion, I have achieved the competencies- on Medical	13	72.2
Knowledge		
2.In my opinion, I have achieved the competencies- on Patient	13	72.2
Care		
3.In my opinion, I have achieved the competencies- on Social	14	77.8
skills and responsibilities		
4.In my opinion, I have achieved the competencies- on Ethics and	14	77.8
Medical Professionalism		
5.In my opinion, I have achieved the competencies-on Inter-	13	72.2
personal, Guidance and collaborating skills		
6.In my opinion, I have achieved the competencies- on Practice	12	66.7
based Learning		
7.In my opinion, I have achieved the competencies-on System	12	66.7
based Practice		
8.In my opinion, I have achieved the competencies- on Lifelong	11	61.1
Learning		

TABLE6. STRENGTHS of the MBBS programme as given by the respondents (n=18)

	ITEMS	REMARKS	No	%
1	LECTURERS	knowledge and support obtained from lecturers	11	61
2.	CURRICULUM	Well- designed curriculum plan Personal and Professional Development sessions are good	12 2	66 11
3	Teaching Learning Methods (TLM)	TLAs like Bedside and clinical clerkship are good	6	33
4	HOSPITAL CLINICIANS	Support and teaching from clinicians	6	33
	HOSPITAL PATIENTS	Patients at hospital are nice and allow the medical students to examine them	6	33
5	CAMPUS	Friendly environment for students to study	4	22
6	TUITION FEES	Tuition fees are cheap and affordable	4	22

#### **DISCUSSION**

The findings regarding Vision and Mission in Tables 1 and 2 shows that the students (60%) are not familiar with the Vision but majority (89%) are in line with the Mission of the University. Table 3 illustrate that majority 72 - 89% of the students feel that the program enabled them to attain each of the eight Program Learning Outcomes detailed in the Program respectively. Table 4 shows that more than 77% of the students acquired the knowledge, skills and attitude required to achieve the eight competencies.

Among the achievement of the stated Program Learning Outcomes, communication skills with other professionals, parents and families fared the highest followed by areas such as developing professional relationships with patients and families, ability to reflect on the experience and embarked on continuous reflections and self-improvements and most importantly ability to understands the various method of comprehensive modalities of patients treatment and understands the healthcare delivery and finance for present and future healthcare services.

Table 5 details that the majority 62% - 78% achieved the competencies in each of the eight major areas, expected on completion of the program.

On each individual competency in eight major areas, highest achievements were on knowledge acquisitions, patient's care, social skills and responsibilities including ethics and medical professionalism. However, further improvements can be achieved on the areas of evidence based and practice based learning as well as being confident to equipped oneself as a lifelong learner.

The results of the Final Professional examination for the current batch is favourable with six distinctions and overall 100% pass. Hence, this mirrors the key findings of this study from the students' perspectives ie that majority had attained each of the eight program learning outcomes and achieved the competencies in each of the eight major areas expected on completion of program.

The strengths of the program as detailed by the students lend support to the experienced knowledge and skills of the Lecturers and the smooth Curriculum implementation which is most commendable. (Table 6.) One of strengths mentioned, is a "well designed curriculum plan". A Curriculum should be designed to include a series of activities each of which should contribute to the achievement of explicit agreed outcomes. Once these outcomes are clearly delineated, curricular components designed to foster the acquisition of "enabling skills" and of knowledge can be structured in a logical sequence. Enabling skills may relate to a number of competency outcomes; (Harris et al 2010)

This study also highlighted that there are also a number of desirable improvements to be made both on the curriculum development, delivery of teaching learning and improvements on the faculties especially on the academics.

The exit evaluation of the MBBS program gathered data through a Questionnaire and 1 open ended question and assessed (1) learners' satisfaction and reaction to the program (all the items in the Questionnaire had been designed to get the respondent's reaction & beliefs ) (2) measure of learning attributed to the program (in terms of acquisition of the Program Learning outcomes (3) changes in learner behaviour in the context for which they are trained (achieving the competencies stated in Program Learning Outcomes) (4) the program's final results in its larger context (the Final Professional results taken in this write up. (Kirkpatrick 1996)

As this study is conducted on a new Medical Private College and the study group is only the third batch of our MBBS graduates, there are much more room for improvements that can be made in order to further improve the progress of the Faculty.

\*This college has attained full 3-year recognition by MMC/MQA, Medical Council of India, Medical and Dental Council of Maldives and listed in World Directory of Medical Schools listed by WHO

#### LIMITATIONS OF STUDY

By itself, the exit evaluation of the MBBS program done is unlikely to guide us into a full evaluation of the educational program. This is because the evaluation does not take into account the intervening variables that affect learning, relationships between important program elements and the program's context, the effectiveness of resource use and other important questions (Holton 1996). However, the study offers a useful way to define the program element following Kirkpatrick's four level evaluation model. (Kirkpatrik1996). It serves to pave the way for a more detailed in- depth study in the future.

The exit evaluation of the MBBS program was done. The objectives of the study were fulfilled i.e. the findings show that the program enabled the students

(a) to attain the eight Program learning outcomes (b) to achieve the competencies in eight major areas expected upon completion of the course and the Strengths in the Program from the Final year 5 students' perspectives had been gathered and reviewed and discussed.

#### RECOMMENDATIONS

The exit evaluation of the current MBBS program highlights the achievements and the strengths. It is recommended that best practices in education that currently exist be used, to further move toward an enhanced MBBS program. (Harris, Snell, Talbot and Harden.2010). Further evaluation studies can be done to answer more in-depth questions about program and to modify any aspects if required.

#### ACKNOWLEDGEMENTS

First and foremost, my grateful thanks to Prof Amaluddin Ahmad, Dean; AP Dr Jegathambigai Ramashwar Naidu, Deputy Dean, Pre-Clinical; other Faculty members for few inputs in initial phase, and the participating Final Year 5 students (Academic 2017-2018 session) just before their completion of the MBBS program and their Final Professional Examinations Last but not the least, to my son-like AP Dr, who had given me access to SPSS version 23 but with request to remain "un -named", a big thanks to you .

# **REFERENCES**

- 1. ACGME 2010a.Accreditation council for graduate medical education: glossary of terms. Accreditation Council for Graduate Medical Education Available from http://www.acgme.org/acWebsite/about/ab ACGMEglossary.pdf
- 2. AMEE Guide No. 25: The assessment of learning outcomes for the competent and reflective physician. Article in Medical Teacher. December 2003 DOI: 10.1080/0142159032000151907 · Source: PubMed. CITATIONS 259.
- 3.Bates R.2004.A critical analysis of evaluation practice. The Kirkpatrick model and the principle of beneficence. Evaluat Program Plan 27:341-347
- 4. Cook DA 2010. Twelve tips for evaluating educational programs. Med Teacher 32:296-301
- 5.Durning SJ, Hemmer P, Pangaro LN.2007. The structure of program evaluation: An approach for evaluating a course, clerkship or components of a residency or fellowship training program. Teach Learn Med.19:308-318
- 6 Durning SJ, Hemmer PA 2010.Program evaluation. In: Ende J, editor, ACP teaching internal medicine. Philadelphia: American College of Physicians.
- 7. Friedman Ben-David M .1999 AMEE GUIDE No 14. Outcome based education. Part 3-Assessment in outcome based education. Med Teach 21(1):23-25.
- 8.Frye AW &. Hemmer PA. (2012) Program evaluation models and related theories: AMEE Guide No. 67, Medical Teacher, 34:5, e288-e299, DOI: 10.3109/0142159X.2012.668637
- 9. Gerrity MS, Mahaffy J.1998.evaluating change in medical school curricula. How did we know where we were going? Acad Med 73:555-559.
- 10.Goldie J.2006.AMEE education guide no 29. Evaluating educational programmes. Med Teach 28:210-224.
- 11. Hamilton JD1999 Outcomes in medical education must be wide, long and deep. Med Teach 21(2):125-126.
- 12.Harden RM, Crosby JR, Davis MH.:7-14 GUIDE No 14. Outcome Based Education: Part 1-An introduction to outcome based education Med Teach 21 (1)

- 13.Harris P, Snell L, Talbot M and Harden RM, for the International CBME Collaborators. (2010). Competency-based medical education: implications for undergraduate programs. Medical Teacher. August 2010.DOI 10.3109/0142159X,2010. 500703.Source: PubMed.
- 14.. Hawkins RE, Holmboe ES. 2008. Constructing an evaluation system for an educational program. In: Hawkins RE, Holmboe ES, editors. Practical guide to the evaluation of clinical competence Philadelphia: Mosby, Inc.
- 15. Hoton E. 1996. The flawed four-level evaluation model. Hum Res Dev Quart 7:5-21.
- 16. Kirkpatrick D 1996.Revisiting Kirkpatrick's four-level model. Train Dev 1:54-59
- 17.Musick DW.2006 A conceptual model for program evaluation in graduate medical education. Acad Med 81:759-765.
- 18.Raupach T, Muncher C, Beiβ barth, Burckhardt G & Pukrop T. (2011). Towards outcome-based programmer evaluation: using student comparative self-assessments to determine teaching effectiveness. <a href="https://doi.org/10.3109/0142159">https://doi.org/10.3109/0142159</a> 2011.
- 19. Shadish WR, Cook TD, Leviton LC 1991. Foundations of program evaluation Newbury Park, CA: Sage
- 20.Stufflebearm D, Shinkfield A 2007. Evaluation theory, models & applications. San Francisco: Jossey Bass/John Wiley & Sons, Inc.
- 21. Woodward CA,2002. Program evaluation In: Norman GR, Van Der Vleuten CP, Newble DI, editors. International handbook of research in medical education. Dordrecht. the Netherlands. Kluwer Academic Publishers.