

Evaluation of Community and Family Case Studies (CFCS): A Community based training of medical students

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SUMMARY

The International Medical University has a Community and Family Case Study (CFCS) programme as part of the training for medical students. The aim of the programme is to emphasize the family and community perspective of patient care in the home environment. A cross-sectional descriptive study was done among 66 final year medical students using a questionnaire. The students were in the 10th Semester and had completed their Community and Family Case Studies (CFCS) programme. Majority (54.5%) of the students who were interviewed were Malays, 34.8% Chinese and 9.1% Indians. Majority of the students (87.9%) liked the programme because it was a good opportunity to understand the patient in their home environment; it improved their communication skills and made them understand the patient better in the community setting. The perceived problem in this programme by the students were mainly choosing an index patient initially (32.8%), patient cooperation (19.0%) and transportation to the patients' house (13.8%). They said that this programme was useful because they learnt more about the disease (45%) and understood the patient management better (15%). The programme also provided the students a wider exposure to medicine (37.9%) and the opportunity to practice clinical skills. Overall the CFCS programme in IMU was well liked by the students as it gave them an opportunity to practice some of the clinical skills in the patients' home environment and it provided an opportunity to manage the patient better. The major problem the students faced was in selecting the index patient.

KEY WORDS:

Community medicine, rural health, medical training, medical curriculum

INTRODUCTION

Over the past several years, medical school curricula have evolved to become more integrated, interactive, and community-oriented and to include elements of research and evidence-based medicine. One study by Nieman and Jones¹ found that about 37% of the 37 medical schools in Canada and North America had home visit in their curricula. Medical education continues to evolve to achieve better outcomes for their graduates so that they can meet the healthcare needs of the society locally and globally^{2,3}. Medical educators continuously develop approaches to teaching and learning that would address the need of the ever expanding medical profession. One of the problems of medical graduates is

posting them to rural areas. Most medical graduates do not like to be posted to rural areas because rural practice is thought to provide a narrow range of patient contact and learning opportunities⁴. It is important therefore that medical students have community based training early so that they understand the problems of the local community in the rural areas or even urban areas. From the traditional hospital based training the students are expected to be involved in a community based training. These include adaptation to changes in society and their expectations, dealing with complex ill-defined problems and making reasoned decisions in unfamiliar situations, critical and creative thinking, and adopting a more universal outlook of medical profession. Thus the community based learning that the medical graduates receive from their medical schools plays an important role for them to acclimatize to the working environment which is the community level. This will help the future doctors to be able to work not only in the hospitals but also in rural areas.

To achieve this aim the International Medical University (IMU) has developed an outcome based curriculum and has eight outcomes and all the teaching learning activities revolve around the eight outcomes given below.

- Application of Basic Sciences in the practice of medicine
- Clinical skills
- Communication skills
- The family and community issues in health care
- Self-directed lifelong learning
- Professionalism ethics and personal development
- Critical thinking and research

To achieve the above outcomes, the educational strategies include elements of community-based approaches to learning and teaching which will complement hospital-based learning. One such activity is the Community and Family Case Study (CFCS). The CFCS programme was introduced in 1993 during the inception of the medical curriculum. The aim of CFCS is to emphasize the family and community perspective of patient care. In the sixth semester students will select an index patient and follow up the patient until the tenth semester. An index patient is defined as a patient who is selected by the student in the hospital and followed up for two years. The criterion for choosing the index patients was that the patient should not have a terminal disease so that follow up for two years may be easier. The selection of the patients was done mainly by the students, however if they had a difficulty they usually got the

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help of their clinical supervisor. The students chose an index patient from the hospital in Semester six and they followed up the same patient till Semester ten. Two students were assigned with the same index patient and they are required to visit their index patient for a minimum of seven times during the two year period. However most of them visited the patient more than the minimum number of times. The students are expected to identify community and health resources available for the patients and help his/her patient to understand and utilize these resources to the best of his/her ability.

This programme allows the students to gain a better understanding of the patient in his home environment and in the community. There are six themes for the students to follow up. The themes are:

- Theme1: Family Structure and Life cycle
- Theme2: Illness behaviour, self-care, complementary medicine and cultural aspect of health care.
- Theme3: Epidemiological study of biological, physical and social environment affecting the illness
- Theme4: Preventive care
- Theme5: Hospitalisation and illness experience
- Theme6: Community Resources

Students visited the patient for each theme separately although there was some overlap of the themes. After each visit the students prepared a write up and a presentation of the visit findings to the supervisors. The supervisors are staff from the clinical and preclinical departments of the University. The supervisors evaluate the presentations made by the students after each visit. At the end of the 10th semester the students prepare a portfolio and this is evaluated. Only if they pass the CFCS programme they are allowed to sit for the final MBBS exam. The aim of the paper is to obtain the students' feedback on the CFCS programme at the International Medical University Malaysia (IMU).

MATERIALS AND METHODS

A cross-sectional descriptive study was done in September 2010 among all Semester 10 Medical Students of the International Medical University in Batu Pahat Clinical School. A face to face interview using a prepared questionnaire was done by a senior lecturer. The interview was done with each student separately. The questionnaire included the illness of the index patients, problems in the implementation of the programme, their perceived usefulness of CFCS, what they learned from the programme, and the major problems they faced during the programme and suggestions to improve the programme. The questionnaire was developed by the author and a pilot study was done among the Semester nine students to validate the questionnaire (Cronbachs alpha 0.7). The relevant changes were made to the questionnaire after the pilot study. For each question the best option was requested as there was possible of multiple answers in the questions. To limit the interview bias the same senior lecturer was used for the interview. The analysis was done using SPSS version 17.

RESULTS

A total of 66 students were interviewed in this study. The majority of students (54.5%) were Malays, twenty three (34.8%) were Chinese, six (9.1%) were Indians, and one (1.5%) was a foreign student. The majority of the index patients chosen by the students were Malays (54.5%), followed by Indians (28.8%) and Chinese (15.1%). Fig 1 shows the summary of the type of index patients chosen according to their illness. Most of the index patients were diabetics, hypertensive, asthmatic, thalassaemic patients and some other conditions.

The students were asked whether they liked the CFCS programme. Majority 58(87.9%) of the students liked the programme. Table I shows the main reason why the students liked the programme. Most of the students (36.2%) said that it was a good learning experience of the students in the patients' home environment, and about one fourth (24.1 %) said that it helped them to improve their communication skills and another eight (13.8%) said that it improved their clinical skills, and ten (17.2%) said that it helped them to understand their patients' better. About eight (12.1%) said that they disliked the programme. When the students were asked further why they disliked the programme they cited that time constraint, long duration of the follow up of the patient (2 years) and distance of the patients' home as their main reasons of complaints.

Table II shows the perceived problems in the implementation of the CFCS programme. About 88% of the students responded to this question and about one third (32.8%) of the students mentioned that choosing an index patient in the hospital as the main problem. Further analysis of those students who found it difficult to choose an index patient for CFCS, the major reasons cited were not being able to get the right patient, reluctance of patients to participate in CFCS, and lack of cooperation from patient and family. About one fifth (19.0%) of them found that the cooperation from the patient was also a problem. Other reason cited were problems in transportation and coordination of visits with the patient.

Table III shows the usefulness of CFCS programme perceived by the students. The most useful aspect of the programme they perceived (45%) was that it facilitated them to learn more about the disease. They believed that it is a good opportunity for them to apply the knowledge learned, to develops communication skills, enhance patient management skill, learn more about disease, as well as opportunity to handle patients overall.

Table IV shows the reasons for recommending the continuation of the CFCS for the future medical students. More than one third (37.9 %) among those who answered said that it provided good exposure and 18 (31%) of them said that it was an opportunity to learn clinical skills. Eight (13.8%) said it created an environment outside the hospital and 6(10.3%) said that it made them understand the patient holistically.

Table I: Reasons for liking CFCS among the students

Reasons for liking CFCS	Frequency	Percentage
It provides good learning experience of the students of the patient in his home environment.	21	36.2
It helps to improve communications skills	14	24.1
It helps to understand patients better	10	17.2
It provides opportunities to practice clinical skills	8	13.8
It is a new experience	5	8.7
Total	58*	100

Table II: Students' perceived problems in the implementation of CFCS

Problems	Frequency	Percentage
Choosing and index patient	19	32.8
Patient cooperation	11	19.0
Transportation to the patients' house	8	13.8
Communication with index patient	4	6.9
Coordination with the patient	4	6.9
Lack of understanding of the CFCS guide	4	6.9
No problems mentioned	8	13.8
Total	58*	100.1

Note: 8 Students did not answer this question

Table III: Students' perceived usefulness of CFCS

Usefulness	Frequency	Percentage
Learn more about the disease	27	45.0
Understand patient management better	9	15.0
Apply knowledge learned at medical school	6	10.0
Develop communication skills	5	8.3
Experience handling patients	5	8.3
Learn to counsel patient	4	6.7
Develop caring attitude	4	6.7
Total	60*	100

*6 students did not respond to this question

Table IV: Reasons for recommending continuation of CFCS

Reasons	Frequency	Percentage
It provides a wider exposure to medicine	22	37.9
It is an opportunity to practice the clinical skills	18	31.0
It create an awareness of the environment outside the hospital	8	13.8
It prepares one to be a good doctor	4	6.9
Makes one to understand the patients holistically	6	10.3
Total	58	99.9

*8 students did not respond to this question

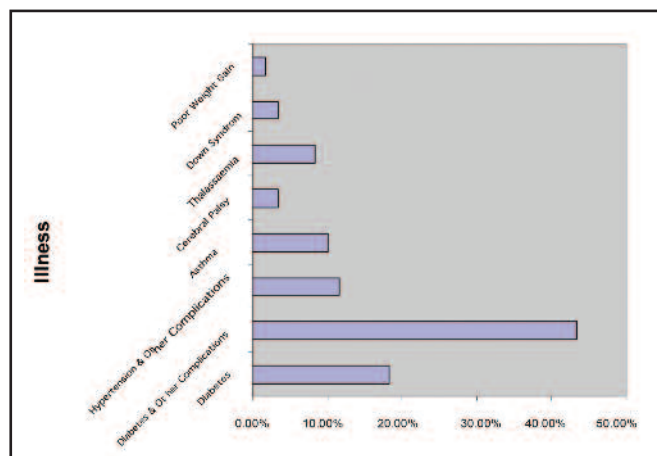


Fig. 1: Type of illness of the index patient in the CFCS programme.

Most of the students, 58 (87.9%), agreed that they liked the CFCS programme. When the students were asked whether the CFCS programme should be continued, the majority of the students 58(87.9%) were of the opinion that the CFCS programme should continue and about one third 20 (34.4%) students also gave suggestions for improving the CFCS programme. The main suggestion was that the programme should have a more structured method to recruit the index patient. They felt that getting the right index patient was one of the key success factors for the programme. The students also wanted the programme to be shortened to 1 year from the present 2 years. Some students also suggested improving the themes of the CFCS and they suggested for a fix schedule for the meetings which could help to ensure the presence of supervisors in all debriefings.

DISCUSSION

The community based training for a medical student is being implemented in many Universities both locally and globally^{5,6,2}. Training doctors in the community is important because of the difficulty of getting doctors posted to rural areas after their graduation. In one study⁷ it was found that training of medical students in community and or rural areas influenced their decision to being posted in rural areas after graduation. Thus the CFCS programme in IMU is not only to expose the students to the problem of patients in their home environment but also to make them to be aware of the problems of the rural and semi-urban patients. This may motivate them to work with rural communities after graduation. The CFCS has been an important component of the medical curriculum and majority of the students (87.9%) interviewed in this study were in favour for the continuation of the programme. A similar finding was observed in the University Malaya programme where about 80% of the students were satisfied with a similar programme⁶. About 58 (87.9%) of the students liked the programme because they said that it was a good learning experience and it helped them to improve their communication skills, clinical skills and team work and understand the patient in his home environment. The programme was seen as a good learning platform for students to apply skills that they have learnt in the medical school especially communicating with patients and understanding them better. It also gave them the opportunity to learn more about the disease and understand the management of the disease better in the home environment. A similar finding was noticed in another study⁸.

This programme also provided an opportunity for the students to apply the clinical and patient management skills of the patients in their home environment. The students viewed the CFCS as a method for them to learn from the patient in not only in the hospital environment but also the home environment. Students are encouraged to select cases where they can learn more about the disease and observe how patients cope and manage themselves at home. As for the learning outcome, the students felt that through CFCS they learnt how to handle patients more efficiently, communicate more effectively, acquire the patient management skills, and learn more about the disease. However it was found that the implementation of the CFCS

programme had some problems. One of the major problems was getting the right index patients and getting continuous commitment from the patient and their family members for a two year period. Overall the CFCS programme provided an opportunity for the students to play the 'doctors' role and to understand the patient better in the community.

CONCLUSION

The students liked the CFCS programme and they felt it was a good learning experience to improve the clinical and communication skills. Having followed through the index patients for almost 2 years enabled the medical students to understand the patient better in his/her home environment. It provided a wider exposure of medical care and prepared them to be a better doctor. It allowed the student to see the holistic view of the patient and this will provide a better understanding of the patient. The problems they faced included in choosing an index patient and sometimes cooperation from the patient. Majority of them felt the programme should continue for future students.

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REFERENCES

1. Nieman LZ, Jones JG. Family Medicine home visit programme in US and Canadian Medical Schools. *J Med. Educ.* 1983; 58(12): 934-40.
2. Prideaux D Medical Education in Australia: Much has changed but what remains? *Medical Teach.* 2009; 31(2) 96-100.
3. Randomski N, Russel J. Integrated case learning: teaching clinical reasoning. *Adv. Health Sci. Edu. Theory Practice.* 2009; 17: 110-15.
4. Deaville JA, Wynn-Jones et al. Perception of UK students on rural clinical posting. *Rural Remote Health.* 2009; 9(2): 1165.
5. Yadav, H. Community Residency Programme (CRP) - A tool for research and rural health training for medical students. *Med. J Malaysia* 2002; Vol. 57, Supplement E.94-8.
6. PLC Tan. The Community Family Case Studies Programme at the University Malaya. *Med. J Malaysia.* Vol. 57 Supplement E Dec. 2002. 86-93.
7. Henry JA, Edwards BJ, Crofty B. Why do medical graduates choose rural areas? *Rural Remote Health.* 2009; 9(1): 1083.
8. Salam Abdus. Community and Family Case Study.: A community -based educational strategy to promote five star doctors for the 21st Century. *South East Asia J of Med Edu.* 2009; Vol. 3 No.1, 20-23.