ATTRIBUTES OF AN EFFECTIVE FAMILY MEDICINE CLINICAL TEACHER: A SURVEY ON RESIDENTS' AND FAMILY MEDICINE FACULTY'S PERCEPTIONS

Dr Chng Shih Kiat

ABSTRACT

Objective: To understand what attributes were considered important for an effective Family Medicine clinical teacher among residents and faculty members.

Methods: An online survey of 15 attributes was sent to 16 residents and 24 faculty members at the National University Health System Family Medicine Residency program. Residents and faculty members were asked to choose the 5 most important and the 5 least important attributes for an effective clinical teacher.

Results: Response rate was 87.5% for residents and 50% for faculty members. Both clinical competence and role modeling were considered important attributes by residents and faculty members. Scholarly activities and organisational skills were felt to be among the least important attributes that make an effective teacher. Role modeling was felt to be the one attribute that was most important while involving in scholarly activities was considered the least important for clinical teacher.

Conclusions: Good role modeling in Family Medicine teaching was considered important for clinical teacher. Though not viewed as an important attribute, involvement in scholarly activities should still play significant role in the Family Medicine residency curriculum. Besides good role modeling, residents valued a non-threatening learning environment with competent teachers who were available, enthusiastic and clear in their teaching.

Keywords:
Attributes, Family Medicine, Clinical teacher

SFP2014; 40(1) Supplement: 72-77

Introduction

Family medicine residency program started in Singapore in 2011. It is a new program formulated based on the Accreditation Council for Graduate Medical Education (ACGME) framework where faculty provides close supervision and gives formative feedbacks to the residents over the 3 year training program. It differs markedly from the former Family Medicine training program in curriculum, teaching methods and assessment methods[1]. The teaching and modeling of the ACGME 6 competencies on patient care, medical knowledge, system-based practice, interpersonal and communication skills, practice-based learning and improvements and professionalism requires the faculty to acquire new skills and knowledge in the teaching and delivery of the curriculum.

A good clinical teacher will result in better learning in the residents[2]. As a young program making a paradigm shift in focus and aim of training from the past in adopting the new ACGME framework in training to fulfill competency outcomes and requirements, there is a need to align what the Family Medicine teaching faculty and residents believe are the important attributes of an effective teacher. This will lead to better performance of the residents and improve overall patient care.

National University Health System Family Medicine Residency program is a unique program where the faculty members come from a wide variety of backgrounds rather than from one single organisation. The backgrounds include academic physicians from the university, clinical professors in the university, doctors practising in community hospitals, nursing homes, public primary care polyclinics and private primary care group practices. Due to the wide variation in the wealth of teaching and practicing experiences that these faculty members bring into the program, this study will also help to align the faculty to meet the residents' educational needs.

Method

The survey instrument used in this study was adapted from a previous study carried out in a Family Medicine setting to allow comparison of the study findings[3]. The survey instrument included a total of 15 items together with a short description of what the attribute means to allow consistent understanding among all the respondents (Table 1).

An online survey via Survey Monkey® was set up and sent to 16 residents and 24 Family Medicine faculty members. The respondents were requested to indicate the 5 most important attributes and the 5 least important attributes that constitute an effective Family Medicine clinical teacher. As the program is a small program, the survey did not attempt to define the number of years in training or working to maintain anonymity of the respondents. After choosing the list of 5 important and 5 least important attributes, the residents and faculty members were then required to indicate their choice of the MOST important and the LEAST important attribute from their list of 5 attributes in both categories.

CHNG SHIH KIAT, Associate Program Director, NUHS Family Medicine Residency Program

Table 1: Survey Instrument

1. **Are you a resident or a faculty member**
   a. Resident
   b. Faculty member.

2. **Out of the following teacher characteristics/ attributes that make an effective residency teacher, choose the 5 MOST important characteristics/ attributes.**
   a. ENTHUSIASM: Energetic and interested in teaching, positive attitude, enjoys their job, doesn't complain
   b. AVAILABILITY: Easily accessible, willing to come in after hours, answers calls promptly and courteously, allows adequate time for teaching, not hurried or rushed, not distracted
   c. CLARITY: Answers questions clearly and definitively, summarises teaching points, able to explain difficult topics
   d. CLINICAL COMPETENCY/ KNOWLEDGE BASE: Competent in patient management issues, knows the medical literature, engaged in CME
   e. FEEDBACK SKILLS: Encourages two-way communication, provides timely positive and negative feedback
   f. ORGANISATIONAL SKILLS: Efficient, good at time management, respectful of residents' time pressures and able to adjust accordingly
   g. PROFESSIONALISM: Respects patients, residents, allied health care staff, appropriate decorum/ dress
   h. WELL PREPARED: For lectures, presentations, rounds
   i. SCHOLARLY ACTIVITIES: Active in research, many publications, nationally renowned
   j. NON-JUDGEMENTAL: Provides a safe learning environment, non-threatening, does not belittle residents, creates an atmosphere wherein residents feel safe to admit they don't know the answer
   k. RESPECTS RESIDENTS' AUTONOMY/ INDEPENDENCE: Treats residents as colleagues, does not 'micro manage'
   l. SINCERITY: Genuine, honest, open, up front, willing to admit when wrong or doesn't know
   m. LISTENING SKILLS: Listens attentively, does not interrupt, seems interested
   n. PRACTICES EVIDENCE-BASED MEDICINE: Comfortable and confident in the principles and application of evidence-based medicine, knows where to find resources/ references for evidence-based medicine
   o. ROLE MODEL: Worth emulating in terms of interactions with patients, staff, achieves a healthy balance between professional/ personal/ spiritual/ physical life.

3. **Out of the following teacher characteristics/ attributes that make an effective residency teacher, choose the 5 LEAST important characteristics/ attributes.**
   a. ENTHUSIASM: Energetic and interested in teaching, positive attitude, enjoys their job, doesn't complain
   b. AVAILABILITY: Easily accessible, willing to come in after hours, answers calls promptly and courteously, allows adequate time for teaching, not hurried or rushed, not distracted
   c. CLARITY: Answers questions clearly and definitively, summarises teaching points, able to explain difficult topics
   d. CLINICAL COMPETENCY/ KNOWLEDGE BASE: Competent in patient management issues, knows the medical literature, engaged in CME
   e. FEEDBACK SKILLS: Encourages two-way communication, provides timely positive and negative feedback
   f. ORGANISATIONAL SKILLS: Efficient, good at time management, respectful of residents' time pressures and able to adjust accordingly
   g. PROFESSIONALISM: Respects patients, residents, allied health care staff, appropriate decorum/ dress
   h. WELL PREPARED: For lectures, presentations, rounds
   i. SCHOLARLY ACTIVITIES: Active in research, many publications, nationally renowned
   j. NON-JUDGEMENTAL: Provides a safe learning environment, non-threatening, does not belittle residents, creates an atmosphere wherein residents feel safe to admit they don't know the answer
   k. RESPECTS RESIDENTS' AUTONOMY/ INDEPENDENCE: Treats residents as colleagues, does not 'micro manage'
   l. SINCERITY: Genuine, honest, open, up front, willing to admit when wrong or doesn't know
   m. LISTENING SKILLS: Listens attentively, does not interrupt, seems interested
   n. PRACTICES EVIDENCE-BASED MEDICINE: Comfortable and confident in the principles and application of evidence-based medicine, knows where to find resources/ references for evidence-based medicine
   o. ROLE MODEL: Worth emulating in terms of interactions with patients, staff, achieves a healthy balance between professional/ personal/ spiritual/ physical life.

Results

Response rate

14 residents (87.5%) and 12 faculty members (50%) responded to the survey.

Response from residents

The responses from the residents and faculty members were shown in Table 2 and 3. The most important attributes that were commonly chosen were (1) Clinical competency and knowledge base, (2) Clarity, (3) Role modeling, (4) Enthusiasm, (5) Availability and (6) Non-judgmental. Enthusiasm, availability and being non-judgmental shared the same number of responses (Table 4). Though clinical competency was the most commonly chosen attribute by the residents, the attribute that the residents felt was the most important to make an effective Family Medicine clinical teacher was that of role modeling.

The least important attributes chosen by the residents were (1) Scholarly activities, (2) Feedback skills, (3) Organisational skills, (4) Practices evidence-based medicine and (5) Well preparedness (Table 5). Of these, the residents felt that being involved in scholarly activities was the least important attribute that was required to make an effective Family Medicine clinical teacher.

Response from faculty members

The top 4 most commonly chosen important attributes were (1) Clinical competency and knowledge base, (2) Role modeling, (3) Enthusiasm and (4) Availability (Table 4). Feedback skills, professionalism and being non-judgmental received equal responses as the 5th most important attribute from the faculty members. Similar to the resident's responses, though clinical competency and knowledge base was the most commonly chosen attribute that marked an effective clinical teacher by the faculty, faculty members also felt that role modeling was the most important attribute that a clinical teacher must have.

The 5 least important attributes most commonly chosen by the faculty members were (1) Scholarly activities, (2) Organisational skills, (3) Availability, (4) Respect for resident's autonomy and (5) Sincerity (Table 5). Being involved in scholarly activities was felt to be the least important attribute of the lot, which was similar to the responses from the residents.

Discussion

There were consistent expectations among the Family Medicine residents and the faculty members about what were the most important and the least important attributes of an effective Family Medicine clinical teacher. Both clinical competency and role modeling were chosen most commonly by both residents and faculty members as important attributes (they were ranked within the top 3 responses) while scholarly activities and organisational skills were commonly felt to be attributes that were least important (also ranked within the top 3 responses) (refer to Table 4 and 5).

TABLE 2: The 5 MOST Important Attributes of an Effective Family Medicine Clinical Teacher

Attributes	Resident Response	Faculty Response
ENTHUSIASM	50%	55%
AVAILABILITY	50%	46%
CLARITY	64%	9%
CLINICAL COMPETENCY/ KNOWLEDGE BASE	86%	100%
FEEDBACK SKILLS	29%	36%
ORGANISATIONAL SKILLS	21%	9%
PROFESSIONALISM	14%	36%
WELL PREPARED	21%	36%
SCHOLARLY ACTIVITIES	0%	0%
NON-JUDGEMENTAL	50%	36%
RESPECTS RESIDENTS' AUTONOMY/ INDEPENDENCE	21%	27%
SINCERITY	7%	9%
LISTENING SKILLS	7%	0%
PRACTICES EVIDENCE-BASED MEDICINE	21%	27%
ROLE MODEL	57%	73%

TABLE 3: The 5 LEAST Important Attributes of an Effective Family Medicine Clinical Teacher

Attributes	Resident Response	Faculty Response
ENTHUSIASM	29%	9%
AVAILABILITY	36%	64%
CLARITY	14%	27%
CLINICAL COMPETENCY/ KNOWLEDGE BASE	0%	0%
FEEDBACK SKILLS	57%	18%
ORGANISATIONAL SKILLS	57%	72%
PROFESSIONALISM	21%	9%
WELL PREPARED	43%	36%
SCHOLARLY ACTIVITIES	93%	100%
NON-JUDGEMENTAL	7%	27%
RESPECTS RESIDENTS' AUTONOMY/ INDEPENDENCE	50%	45%
SINCERITY	7%	45%
LISTENING SKILLS	29%	18%
PRACTICES EVIDENCE-BASED MEDICINE	57%	27%
ROLE MODEL	0%	0%

Both groups felt that role modeling was the most important attribute. Role modeling was considered to be an important tool in the teaching of 'relationship skills in clinical settings' however development in the skills to be good role model was lacking[4]. Being highly valued as an attribute by both residents and faculty members, faculty development in the area of role modeling such as role model transparency should be undertaken.

Being involved in scholarly activities was felt not to be an important attribute for a clinical teacher by both groups. Involvement in scholarly activities was also felt to be an unimportant attribute in the earlier study by Buchel and Edwards[3]. Older papers by Gjerde and Coble and Klessig et al also concluded that faculty research was not an important factor in effective clinical teaching or quality of training program respectively[5,6]. However the American Academy of Family Physicians in their recommendation for Family Medicine training curriculum had suggested the importance of research and scholarly activity in Family Medicine education[7]. Involvement in scholarly activity was also considered necessary for faculty by the ACGME framework. The intention is to train Family Medicine doctors in critically appraising clinical evidence and in the search for new knowledge and better ways of managing Family Medicine patients. Dr Tom Bailey in his address on research in Family Medicine had said "Research should not be viewed simply as a branch of our discipline. In many ways, research is the root of family medicine. While research often takes place behind the scenes, without it our discipline might not exist."[8]. The apparent disparity on the importance of scholarly activities as viewed by the Family Medicine community and the survey results was likely caused by the perception of what a clinical teacher should be. Research and scholarly activities are necessary components in the Family Medicine curriculum but on the day to day clinical teaching of Family Medicine, other attributes were considered to be more important by the residents than being active in scholarly activities.

There were some dichotomies in the responses from the residents and faculty members. Though the faculty felt that good feedback skills and being professional were among the important attributes of a good clinical teacher, the residents did not think so. The residents actually rated good feedback skills as one of the least important attributes. The current study did not separate the responses of the residents according to the years of training. As a new program, majority of the program's residents (75%) had less than 15 months of residency training. It could be that the younger residents, early in their training career, valued a one-way educational instruction from the clinical teachers in amassing clinical knowledge rather than a two-way communication process where the residents valued their views to be heard. As ACGME training framework is mainly formative in nature, further exploration on the residents' views on the feedback process will be necessary.

Table 4: Most Important Attributes of a Clinical Teacher in Descending Order

Residents	Faculty
Clinical competency and knowledge base	Clinical competency and knowledge base
Clarity	Role model#
Role model#	Enthusiasm
Enthusiasm*	Availability
Non-judgmental*	Feedback skills^
Availability*	Professionalism^
	Non-judgmental^

 # Most important attribute.

** Enthusiasm, non-judgmental and availability shared equal resident responses.*

^ Feedback skills, professionalism and non-judgmental shared equal faculty responses.

Table 5: Least Important Attributes of a Clinical Teacher in Descending Order

Residents	Faculty
Scholarly activities	Scholarly activities
Feedback skills	Organisational skills
Organisational skills	Availability
Practices evidence-based medicine	Respect for resident's autonomy
Well preparedness	Sincerity

While the residents considered availability as one of the top attributes, the faculty felt that it was one of the least important attributes. This disagreement could arise as faculty members were generally wearing multiple hats and Family Medicine training was just one of those responsibilities. However residents under training felt that having teaching faculty who were easily accessible, willing to come in after hours, answered calls promptly and courteously, allowed adequate time for teaching, not hurried or rushed and not distracted will enhance their teaching quality. It is therefore important that teaching faculty members are encouraged to set aside protected time to teach and be available for consultation by the residents.

Clarity was ranked as one of the lowest in the list of attributes by the faculty members. But the residents placed clarity in answering questions, summarising teaching points and ability to explain difficult topics as one of the top attributes. This current study validated the findings from the previous study carried out by Buchel and Edwards[3] in that the residents valued a clinical learning environment which was non-threatening (non-judgmental) and capable teachers (competent in clinical knowledge and clear in instructions) whom the residents can relate to (available, enthusiastic and who role model).

Limitations

This study was limited by the small number of survey participants and therefore will not be representative for other Family Medicine training programs. There may also be varied interpretations of the different attributes by the survey participants despite defining the attributes. This can only be overcome through a qualitative study where individual responses are gathered by trained interviewers. The response rate from the faculty members was only at 50% and this may result in representation bias.

Conclusions

Role modeling was considered as the single most important attribute for an effective Family Medicine clinical teacher by both residents and faculty members. The importance of good role modeling in Family Medicine teaching needs to be explored and faculty developments on how to be a good role model needs to be encouraged. Though not viewed as important for a clinical teacher, involvement in scholarly activities should still play significant role in the Family Medicine residency curriculum. Overall on top of good role modeling, residents valued a non-threatening learning environment with competent teachers who were available, enthusiastic and clear in their teachings.

Acknowledgement

Dr Tamara L Buchel for allowing the use of the survey instrument in the current study.

A/Prof Goh Lee Gan for his review of the paper and insights.

REFERENCES

1. Wong TY, Chong PN, Chng SK and Tay EG. Postgraduate family medicine training in Singapore--a new way forward. Ann Acad Med Singapore 2012; 41(5): 221-6.
2. Stern DT,Williams BC, Gill A, Gruppen L,Woolliscroft JO and Grum CM. Is there a relationship between attending physicians' and residents' teaching skills and students' examination scores? Acad Med 2000; 75: 1144-6.
3. Buchel TL and Edwards FD. Characteristics of effective clinical teachers. Fam Med 2005; 37 (1): 30-5.
4. Egnew TR and Wilson HJ. Role modeling the doctor-patient relationship in the clinical curriculum. Fam Med 2011; 43(2): 99-105.
5. Gjerde CL and Coble RJ. Resident and faculty perceptions of effective clinical teaching in family practice. J Fam Prac 1982; 14(2): 323-7.
6. Klessig JM, Wolfsthal SD, Levine MA, Stickley W, Bing-You RG, Lansdale TF and Battinelli DL. A pilot survey study to define quality in residency education. Acad Med 2000; 75(1): 71-3.
7. AAFP Reprint No. 280. Recommended Curriculum Guidelines for Family Practice Residents: Research and Scholarly Activity. Revised June 2003. Accessed at http://www.aafp.org/online/etc/medialib/aafp_org/documents/about/rap/curriculum/research_and_scholarly.Par.0001.File.tmp/Research.pdf on 4th September 2013.
8. Bailey T. Research in family medicine. Can Fam Phy 2007; 53(7): 1249.