Teaching Family Medicine - what, why and where

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Julia Blitz-Lindeque graduated with MBCh from Wits. She completed the Academy of Family Practice Vocational Training Scheme at Edendale Hospital, Pietermaritzburg and Benedictine Hospital, Nongoma and her MPraxMed at MEDUNSA. She then became a part-time facilitator of the KwaZulu M Fam Med group of MEDUNSA while in private general practice in Pietermaritzburg. In 1997, she joined the Department of Family Medicine at the University of Pretoria and was appointed Chief Family Physician, Pretoria Academic Hospital and Professor and Head of Department of Family Medicine in June 2001. She is currently the Chairperson of the Family Medicine Education Consortium, the Vice-Chairperson of the Committee for General Practice of the Medical and Dental Professionals Board of the Health Professions Council, a Councillor of the College of Family Practitioners and was the Associate Editor of South African Family Practice journal. She is interested in the appropriate teaching of Family Medicine in South Africa at both an undergraduate and post-graduate level, research in Family Medicine and the further development of our discipline. 

1. INTRODUCTION

Although Family Medicine has a strong presence in the undergraduate curriculum of the University of Pretoria, School of Medicine, there are currently limitations to reaching all the goals of teaching Family Medicine when it is based largely in tertiary academic teaching hospitals. In this address, I would like to

- explore the characteristics of Family Medicine (the what),
- the teaching objectives that we have (the why) and on that basis,
- motivate why we need to look for sites for the teaching of Family Medicine in addition to those that we already have (the where).

Family Medicine is the discipline that focuses on a commitment to the person, their family and their community rather than their disease.

This slide graphically depicts the difference between family medicine and other disciplines. This difference is that family physicians become experts in seeing different illnesses in the same person, whereas specialists are experts in seeing the same diseases in different people. (Table 1)

This different perspective requires specific exposure to the characteristics of Family Medicine in the teaching of the discipline.

2. CHARACTERISTICS

I would like to address the Characteristics of Family Medicine (the what) and the unique contribution that Family Medicine makes to medical care.

In order to achieve the above-mentioned focus on the person, there are five characteristics that need to be identified in order to establish the teaching objectives for Family Medicine:

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**Boland 2002**
1. The first of these is contextualised care

This is the defining characteristic of Family Medicine. The implications of this are that:

- health care problems are seen in a biological, psychological and social (biopsychosocial) context (in other words, it is as important to be concerned about the effects of the patient's symptoms as you are about the cause of the symptom),
  - Biological
    Pathophysiological deviation.
  - Psychological:
    Individual's thoughts, fears, feelings and expectations.
  - Social:
    Family, work and environment

and that:

- general systems theory (which takes account of chaos and complexity in the real world) is medically applied (in other words, that causation is not linear and that the different parts of a phenomenon interact in relationships with each other to produce an outcome).

Contextualised care allows us to help patients to define the meaning of their medical problems in terms that are of meaning to them in their context. This facilitates the development of a collaborative plan that factors patient and family values into a strategy for managing the problem in each of the biopsychosocial contexts. The objective of contextualised care is to initiate and foster an effective therapeutic partnership by understanding the household and social, functional, financial, dependency and cultural contexts that the patient exists in.

Ransom and Vandervoort in their 1985 publication stated that:

“Family Medicine is an emerging discipline concerned with the relationship of life in small groups, to illness and care. Its focus is on the ecology of relations among individuals in families, and between families and their surrounding environment. Family medicine aims toward understanding and changing health problems that cannot be managed successfully by dealing exclusively with the individual and his or her illness, abstracted from the pattern of recurrent interpersonal situations that shape and transform a human life.”

McDaniel in 1990 outlined the following aspects of contextual care in Family Medicine:

i. Family-oriented care is based on the biopsychosocial model.

ii. The primary focus of medical care is the patient in the context of the family, because:
   a. The family is the primary source of many health beliefs and behaviours.
   b. The stress that a family feels when going through developmental transitions can become manifest in physical symptoms.
   c. Somatic symptoms can serve an adaptive function within the family and be maintained by family patterns.
   d. Families are a valuable resource, and source of support, for the management of illness.

iii. The patient, family and physician are partners in medical care.

iv. The physician is seen as part of, rather than apart from, the treatment system.

2. The second characteristic of Family Medicine is continuity of care

This is the fundamental value of Family Medicine.

The concept covers continuity of the doctor-patient relationship and of the transfer of medical information on a number of different levels:

Chorological level

This is a responsibility over time. Knowing patients when they are well provides the family physician with powerful information about their personalities and character that can be drawn upon and used to advantage when the patient becomes ill. Caring for patients through a series of illnesses can help the physician to understand the patient’s coping mechanisms, tolerance of symptoms and personal resources.

Geographical level

This continuity is assured when a single provider is responsible for the coordination of care and is accessible to the patient no matter where the care is provided. This ensures continuity of information to and from the family physician when other health care providers become involved in the patient’s care.

Family-oriented level

For this level of continuity to be a reality, all of the members of a family unit should identify with and seek care from the same primary care provider. Caring for families makes it easier to recognize and treat illnesses or conditions that occur more commonly in families. Illnesses invariably have an impact on all members of the family, and the course of an illness can be dramatically affected by family factors. Many patients value family care.

Providing continuity of care has the outcome of improved patient satisfaction, doctor satisfaction, cost of care and quality of care.

3. The third characteristic of Family Medicine is accessing care

Access to health care does not guarantee that care will be utilized appropriately. There are a number of factors that contribute to patients seeking health care – what makes people become patients? There is a highly complex process by which a person evolves from thinking of themselves as healthy to thinking of themselves as sick. This is greatly influenced by social, family and cultural expectations and beliefs. Access to care occurs when perceived needs outweigh barriers.

It is essential that family physicians have the skills to identify and overcome these barriers to access, as well as to identify patients who overdose the system. The family physician needs to establish the underlying reason why the patient chooses to consult.

Some of the factors that patients consider in deciding to access care are:

- Seriousness or severity of symptom e.g. coughing may be acceptable until the sputum contains blood.
- Degree to which the symptom causes anxiety or fear e.g. sudden weakness in a limb.
• The opinion of the family “health authority” e.g. the grandmother.
• Previous personal or family experience with the symptom.
• The degree of inconvenience involved in accessing care e.g. no transport to clinic.
• Economic impact of missing work or school e.g. no work, no pay.
• Degree to which the patient, or family, values continuity of care with their own provider e.g. not wanting to access an off-the-street walk-in facility.
• Personal or family experience with health care e.g. ability to self-treat.
• Economic costs of accessing care e.g. user fees.

So, barriers to access can be financial, geographical, cultural, family-based, health system, gender-related or educational.

Reasons for patterns of overuse include:
• Patient has an undiagnosed mental illness, such as depression or anxiety disorder, eating disorder.
• Patient has a drug or alcohol abuse problem.
• Patient is living in a dysfunctional family or marriage.
• Patient is seeking care to obtain safety from a situation of family violence or intimidation.
• Patient is lonely or emotionally needy and utilizes care as a social outlet.
• Patient is obtaining secondary gain from utilizing care, such as an excuse to miss work, or for disability.
• Previous physicians may have implicitly or explicitly encouraged the patient to overuse care.
• Patient has had a prior traumatic experience leading to excessive worry about health e.g. surgery that was complicated, remission phase of cancer.

These are not things that patients usually present with directly, but overuse patterns should alert the physician to the possibilities of such “hidden” problems.

A confusing or unusual complaint from the patient often precipitates a quest for the “holy grail” of the rare diagnosis without any attention to the underlying and important problems that exist within the contexts of care other than the biomedical.

4. The fourth characteristic of Family Medicine is the provision of comprehensive services

Family medicine needs to be aware of which services are most essential to the health of the community being served and to ensure competent management of the common problems. This needs to include the scope and extent of services required by members of the community (that is whether the service should be performed at the site of care or whether the patient would be better served by being referred to another health care centre). For instance, it may not make sense to develop an expert service in the management of pulmonary tuberculosis in a community where this is uncommon – it may be more effective to refer these patients to a center that develops the relevant expertise. Equally if the community that you work in has a high prevalence of hypercholesterolaemia, it may be appropriate to develop a full range of risk factor assessment and lifestyle and disease modification services.

Comprehensiveness of services also includes the concept of methods of evaluation and improvement of service provision (this would include competence of practitioners and assessment of the scope of services). This concept is served by the carrying out of quality improvement exercises as an integral part of practice. This is the constant assessment against a pre-determined standard, of the services provided by you and your team in your practice.

5. The last characteristic of Family Medicine is co-ordinated care:

Family physicians need to attend to all aspects of each unique patient’s health care needs:
• health promotion and patient education,
• preventive services and screening,
• formation, organization and leadership of health care teams,
• referral process to other health care providers in the community with effective transfer of information,
• chronic illness management,
• patients with special needs (geriatric patients, disabled).

The success of Family Medicine revolves around the success of the consultation in discovering the reasons why the patient has sought care on that particular occasion, and knowing what within the health care system that patient’s context of care will be available to promote or return health.

Stott summarized the potential of every Family Medicine consultation in the following way: The Family Physician needs to pay attention to medical problems, but we need to remember that these may be of two types - the presenting problem (maybe an ingrown toenail), but also the continuing problems (such as an alcoholic spouse). However, attention also needs to be paid to the health behaviour of patients. Here there are again two areas – that of modification of help-seeking behaviour (understanding why the patient chose to come at that time, including an understanding of barriers to seeking health care and overuse of health care systems) and opportunistic health promotion (the obligation to consider ways of maintaining health or minimizing complications that may result as a consequence of risk factors or disease). (Table 2)

3. TEACHING OBJECTIVES

In the light of these five characteristics of Family Medicine, I would now like to move on to why we think that Family Medicine has a place in the medical curriculum.

In order to enable students to deal with undifferentiated patients seen at the first point of care, we need to expose students to the case mix that is seen at community level in addition to that seen at academic hospital level.

The following diagram is from an article that describes the ecology of medical care in the United States in 1996. (Figure 1)

It can be seen that of 1000 men, women and children in the United States, on average each month, 800 experience symptoms, 327 consider seeking medical care, 217 visit a physician in the office (113 to a primary
Table 2:

<table>
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<tr>
<th>Attention to medical problems</th>
<th>Attention to health behaviour</th>
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<tr>
<td>A Management of the presenting problems</td>
<td>B Modification of help-seeking behaviour (health care utilization patterns and resources)</td>
</tr>
<tr>
<td>C Management of continuing problems</td>
<td>D Opportunistic health promotion (disease prevention and health education)</td>
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*Stott and Davis 1979*

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care physician), 65 visit a professional provider of complimentary or alternative care, 21 visit a hospital-based outpatient clinic, 14 receive professional health services at home, 13 receive care in an emergency department, 8 are hospitalized and less than 1 is admitted to an academic medical centre. Please note that these results are not subgroups of one another; they are all based on the denominator of 1000. The researchers confirmed that the number of persons receiving care each month in different settings varies according to age, sex and race. This shows that each month a large proportion of the population has symptoms. Almost 25% visit a physician’s office, but less than 0.1% is admitted to an academic medical centre.

Interestingly this study confirmed the stability of the relationships of forms of care first presented by White in Britain in 1961. There is probably no reason to think that the proportions should be greatly different in this country!

There are various objectives in terms of knowledge, attitudes and skills that result from the characteristics mentioned above in terms of what Family Medicine strives to achieve within a curriculum.

The contextual model of Family Medicine means that students need to establish, understand and know how to use, the patient’s context in developing a health care plan, within a health care system.

**Competencies needed for this are:**

- Communication and inter-personal skills to build a relationship of trust and respect between patient and doctor.
- Cultural competency to understand the social and family aspects of the culture of which the patient is a part.
- Preventive care competency to determine when appropriate measures should be taken to prevent progression of risk factors to disease, or to prevent progression of complication of disease.
- Competency to continuously evaluate and educate oneself in terms of the services that one is required to provide to the community in which one works.
- Competency in systems thinking to take into account the multi-factorial relationships between the bio, psycho and social contexts of each individual patient.
- Competency to assess community needs in an attempt to provide services relevant to their particular needs.
- Competency to care for common, acute, chronic and behavioral problems in a way that is cost-effective and provides as much care as possible within the community.
- Competency to recognize uncommon problems and to deal with them appropriately.
- Competency to organize and coordinate the health care team of colleagues, other health care professionals, community organizations, etc.

A significant part of South Africa’s health care plan revolves around the effective functioning of the district health system. This is the level of the system at which Family Medicine finds its home. The district health system includes an effective inter-relationship between private sector primary care physicians as well as public sector primary health care services. This means that we have an obligation to train South African generalist medical graduates how to work in this system - not just from an understanding of policy and theory, but to have the skills to be able to practice in that system. It is also crucial for the effective provision of health care in South Africa that there is an effective primary health care system which ensures quality care of patients with appropriate referral further up the system and competent dealing with patients when they are referred back down the system. In terms of life-long learning and continuous quality improvement, it is important to understand what you are referring for (up referral) and to have the opportunity to learn from what happened when the patient was referred. The importance of
working in relationship with specialists is crucial for this. Training to work in a low technology environment, where referral for further investigations and specialist opinions is not as easily accessible as within secondary and tertiary hospitals, is also important to ensure that the future graduate is comfortable working in this sort of environment. The needs of the management of the patient need to be weighed against the logistical difficulties of obtaining these investigations as well as the logistical difficulties of the ambulatory patient returning for the results.

Training needs to place great emphasis on the development of self-sufficient practitioners with a deeper understanding of the impact that illness and disease have on a patient and their family, as well as an obligation to be aware of one’s own limitations and a commitment to life-long relevant learning.

The educational motive for exposing all students to the Family Medicine care model is that it useful for all health care practitioners, although the nature of some disciplines will preclude incorporation of these concepts to any large extent. Being taught in the context of where you will be practicing is likely to ensure that the knowledge, skills and attitudes are learnt and practiced, because they are requirements of providing service in that context, not merely theoretical constructs.

Teaching students how to respond to the needs of their practice (patients and community) is a locally relevant and internationally competitive skill.

Table 3 is a comparison of the most common reasons for visits to Family Physicians at the Mathibestad clinic near Hammanskraal and the American National Ambulatory Medical Care Survey. It is evident that different communities present with different reasons for visits. It can be seen that while hypertension is the most common reason for visiting Mathibestad, it is only the 4th most common reason for visits in the United States. Antenatal care is a much more common reason for visits to Mathibestad than it is in the NAMC survey. Most significant though are the ten reasons in italics on the Mathibestad list, which do not even appear on the NAMCS list! It would appear that practicing in the Mathibestad community requires different knowledge skills in terms of the ability to deal even with common problems.

This illustrates the necessity of understanding the particular health needs of the community in which one is working.

4. SITES

Lastly, I would like to propose why we need to look for additional sites for the teaching of Family Medicine in addition to those that we already have. In other words, where and how these teaching objectives would best be met

Because all patients arriving at academic hospitals are referred by another health care worker, these patients are essentially no longer “undifferentiated” patients. Students are seeing a selected group of patients, with an already predetermined notion of what the problem might be. However, it is important for students to experience in this tertiary setting, the role of ambulatory care and the relationship with specialists and other members of the health care team. This allows them to see how the different health care professionals at different levels of the health care system can effectively work together in the provision of seamless health care services to patients. It gives students an opportunity to learn skills more regularly performed in the larger hospitals.

Distancing (or dislocation) of the academic hospital from a specific community that it serves, makes it difficult for students to see and understand the patient’s social context and habitat. Therefore, it is also important to balance the academic hospital site of training with sites where there are opportunities to meet some of the other teaching objectives, for example cultural competency, systems thinking and assessing community needs.

Training sites that provide only ambulatory care, with no access to investigations other than those that can be done at the bedside and logistically difficult access to hospital care, and with truly undifferentiated patients, provide a more accurate perspective on the practice of Family Medicine. It is more closely allied to the sort of practice that many of our undergraduates are likely to experience in smaller hospitals and their associated clinics where they will
spend time during their community service, as well as to the type of private generalist practice where many of them may practice in the future. There is evidence that providing sites of medical academic excellence in communities adds value in terms of improving the health care of those communities.

Training in parallel with other disciplines such as nursing and allied health professionals, and the ability to interact with community structures enables greater competency to assess community needs and to work in a team.

The role of senior mentors who have a long-term commitment to their practice cannot be overlooked. These members of staff illustrate the value of continuity of care and of understanding community resources (both other health professionals in the community and community agencies and organisations).

5. RECOMMENDATIONS

I would like to conclude with the following five recommendations, which need to be in place in order to reach the objectives of teaching Family Medicine:

1. Teaching practices (in central and satellite locations, in hospital and community-based sites) need to include sites providing all levels of care in order for students to be exposed to the full spectrum of diseases as well as potential levels of care with each one’s benefits and constraints. Each site needs to develop the concept of it being a practice with an awareness of patients’ contexts and a sense of responsibility for the practice population. The site needs to have a dedicated team of health care professionals who will strive to provide the best possible quality of care of relevance to the problems that its patients present. These sites should be seen as an integral part of the academic teaching complex. The apartheid of hospital and district health care systems should be abolished.

2. Joint appointment teaching staff should also be appointed to sites outside the academic hospitals, in the district. These appointments should be within the private sector and the public sector. This would have the advantage of providing academically minded mentors on site. These members of staff could be not only Family Physicians, but also nursing staff and possibly allied health professionals, to facilitate the parallel training of students from different disciplines.

3. Model training facilities would be created at which all the competency objectives mentioned previously could be achieved. This would result in the provision of excellent quality of care to the communities served. This would require the staff to have a sense of long-term commitment to the community being served and to interact with community structures and across the barriers between private and public sectors. These facilities would represent the ideal at which the District Health System is aimed.

4. Mastering the outlined knowledge, skills and attitudes will enrich our graduates’ ability to practice comfortably in the future at sites outside of the large hospitals where most of their training has occurred. It is hoped that this degree of comfort would allow them to consider as a viable option the return to such practices after they have graduated. This would increase the pool of graduates looking at practicing as a generalist in South Africa as an acceptable career path.

5. We, in the Department of Family Medicine, would like to support the University of Pretoria’s vision of producing an “Innovation Generation of medical graduates”, by providing our students with the opportunity of broadening their experience from the current largely hospital based one to an experience that in addition embraces providing care to people in the context of their communities, over time and with an understanding of the systems (social, family and health care systems) in which they find themselves working.