

BRIEF COMMUNICATION

## **More Questions than Answers? Expanding Students' Reflections from a Community Health Experience**

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### **Context**

Medical schools' curricular content ranges widely from precise basic science material to a heterogeneous mix of clinical presentations to diffuse social and life issues. The context within which this content is delivered is also variable, covering precisely designed laboratory settings, structured clinical ward settings, and uncontrolled community settings. Educators in medical schools, while able to cover curriculum content didactically, may find it challenging to adequately facilitate a wide and varied exposure to relevant learning issues. This challenge becomes greater when moving from the basic science laboratory to the community setting.

The response of the student to community-oriented programmes is an important consideration in helping educators to assess possible learning outcomes beyond the stated learning objectives. This adds an important dimension to the restricted learning environment of the lecture room. It is in fact noted that some of the skills doctors require, can only be gained through planned practical learning experiences in a representative range of health problems encountered in their normal setting (World Health Organization, 1985).

Ideally student learning should be permanent and pertinent and of value to the student at present and in the future. This is, in essence fostering a deeper

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learning approach which students require for knowledge to be retained and effectively applied. In deeper learning, the intention of the student is to understand, with the student maintaining the format and process of completing a desired task. This is far more effective for long-term learning than the usually fostered surface learning approach where student learning is based upon the intention to complete a task (Johnston, 2002). To encourage deeper learning in students, practical exposure is important, but for the experience to be most beneficial, students should also be able to explore issues within and around the curricula and be given an opportunity to probe and ask reflective questions. A repository of unanswered questions may be used to show that students have not been simply imbibing the knowledge delivered through course objectives.

At the University of the West Indies, Mona campus, Jamaica, the first clinical year clerkship represents the first opportunity for students to be given a practical experience in family health, by being exposed first-hand to life in the community. The curriculum includes one week of activities within a low-income inner-city community. Students are required to visit families, the family court, which is a government agency set up to resolve family related disputes, and a general practitioner's office. During the family visit, students assess the patients' management of their illness in the home setting. The clerkship's outline which states aims and learning objectives for the students is presented in Table 1. However, all of the possible learning outcomes of such an experience cannot be listed because they include implicit learning objectives within that part of the medical curriculum described as the "hidden curriculum" (Hafferty, 1998).

One way to assess the teaching programmes for their relevance and efficacy is to assess the areas which students felt were not completely addressed as shown by questions remaining unanswered after the clerkship. This study sought to better understand students' reflections in relation to questions they felt required further exploration after completion of the family health clerkship.

## **Methods**

End of clerkship assessments completed under examination conditions by two successive groups of third-year medical students ( $n = 64$ ) were reviewed. As a part of this assessment, students were asked to list two questions they felt were unanswered at the end of the clerkship. All questions were listed and a content analysis conducted to explore the main emerging themes. The content analysis, done by two of the authors, was started by reviewing and listing all of the topics highlighted by students in their questions. Similar topics were then put together into groups and an emerging theme identified for each group. The themes were not chosen beforehand but emerged based on the common content of each group of topics.

**Table 1.** Topics covered in the family health clerkship

Topics
<i>Human Sexuality</i>
Assist student with becoming comfortable with human sexuality and related issues in a primary health care setting
Clarify physician's role in human sexuality
Become familiar with sexual issues throughout life-cycle
Review sexual response
<i>Family Study</i>
Bio-psycho-social model of health and disease
Holistic appreciation of patient in the community
<i>Primary Health Care</i>
Organization
Role of Family Physicians
<i>Health Promotion</i>
Individual behavior change
<i>Doctor-Patient Relationship</i>
Exposure to patient emotional needs
Student emotional reflection during patient interaction
Consulting styles and their impact on the patient
<i>Social Agencies Supporting Patient and Family</i>
Describe the role of social services and agencies in maintaining and supporting healthy development
<i>Complementary Medicine</i>
Explain related terms
Discuss acupuncture and yoga
Types in Jamaica
Explain why people use complementary practitioners
Number of people using complementary medicine and the costs
Discuss effectiveness
Discuss attitude of the medical profession and public in Jamaica toward complementary medicine

## Results

Of the 64 students taking the examination, 56 (87.5%) listed a total of 109 unanswered questions. These were then grouped into six main themes related to physician-related issues, patient-related issues and physician-patient interaction.

The highest ranking theme was found to be “doctor-patient relationship” with 20% of the 109 unanswered questions falling into this theme (Table 2). However, there was little variation in frequency for the top four themes (17–20%).

The most frequently asked questions within the theme, “behavior change and health-seeking behavior” were related to the attitudes of community

**Table 2.** Emerging themes from students' unanswered questions

Themes	Number of Questions ( <i>n</i> )	%
<i>Physician-Related Issues</i>		
Medical issues	20	18
Issues related to the profession	13	12
<i>Patient-Related Issues</i>		
Community health and social services	18	17
Government programmes and resources	16	15
<i>Physician-Patient Interaction</i>		
Doctor-patient relationship	22	20
Behavior change and health-seeking behavior of patient	20	18

members towards health. For the theme, "community health and social services", the most commonly asked questions were related to the living conditions and environs of the patient. "Community health and social services" and "Government programmes" were themes that focused on the inadequacies of structural systems within the community.

Five of the six themes are directly related to issues concerning patients' environs and treatment. These include all the themes except that of "issues related to the profession" which was more related to managerial aspects of medicine, e.g. how is a general practice managed in terms of finances and administration?

## Discussion

Developing a deeper learning approach among medical students should effectively produce critical thinkers and teach students for the long-term. Fostering this deeper learning can be done by exposing students to "real-life" aspects of family health through practical exposure, in addition to encouraging reflective thought. At the end of the clerkship, students were encouraged to state questions which they felt were unanswered. This was aimed at stimulating a learning environment that shifts focus from what students are taught to more on what they learn. This initial analysis brings out aspects of the hidden medical curriculum, one of three interrelated components of the overall curriculum (Hafferty, 1998).

As a result of students asking these questions, we were able to delve into the possible basis for their questions and ascertain how they might illustrate aspects of the course itself. The students seemed to have become more aware of the social conditions that plague low-income communities and seemed empathetic with patients and their current situations, as five of the six themes were directly related to issues on patients' environs and treatment.

The “doctor–patient relationship” was the category with a slightly larger percentage of students having questions. This relationship is a key component of patient treatment and requires adequate focus within the curriculum. These students had a seminar on this relationship in the clerkship and were given practical experience by visiting and observing a general practitioner’s office. The many unanswered questions that arose, related to this topic, may be revealing the presence of inadequacies in this their first structured exposure to this topic. It may also be an indication that students’ interests were sparked and therefore they were eager to learn more about the doctor-patient relationship. In addition, it may reveal that the students having been given an opportunity to scrutinize and discuss their own experience of the doctor-patient relationship, were left to reflect on whether or not their present ideals about such a relationship would change in the future.

“Behavior change and health-seeking behavior” is a focus in the health promotion aspect of the course and tied with “medical issues” as the second highest ranking theme. This may not necessarily represent a deficiency in the curriculum but it may highlight an area within the community’s health that needs to be addressed. This may also be so for the theme “community health and social services”. Within these themes, students seemed to question living conditions and health attitudes of the patients most frequently and this brings to light the needs of the community. Within the “behavior change and health-seeking behavior” students were uncertain about the attitudes of community members about their health and whether a short one-week process of interaction would have any significant impact on the behavioral issues that were discovered.

“Medical issues” was not a direct learning objective of this clerkship, but students were still exposed to such issues in the communities and at general practitioner visits. “Professional issues” is another theme that arose but was not specifically covered in the clerkship. These emphasize the relative scope and blurred boundaries of a curriculum that includes practical experience and results in the acquisition of knowledge or at least reflection on both the stated objectives and on more implicit aims. This is a characteristic feature of fostering deeper learning as facilitated in this clerkship.

“Community health and social services” and “government programmes and resources” were also topics covered in the curriculum. The questions in these themes focused on the inadequacies of the structures and systems in place. These two topics are related by the fact that they address the facilities and mechanisms available for the poor. Similar reflections are necessary, in other community settings to cover the range of different elements in community services to make this aspect of primary care training more effective (World Health Organization, 1985).

“Undergraduate medical education, as with any other educational programme, needs ongoing improvements to meet the changing demands of medical practice of the 21st century” (Nandi *et al.*, 2000). One way in which this

reform can be accomplished is to analyze aspects that may be leaving our students ill-equipped to take on their professional roles. Unanswered questions might provide some insight into these aspects. Most of the themes of the questions reflected the course outline and might be interpreted as aspects of the curriculum that require reformation in either delivery or content or both. At a broader interpretation, themes may also reflect thoughts that have been encouraged and stimulated by the course. The development of reflective abilities is considered to be an increasingly important component of professional development (Henderson *et al.*, 2002). It might also be that some students may simply be asking questions as a result of poor or limited participation on their part during the clerkship. Although students generally seemed vigilant during the clerkship, the extent of cognitive engagement was hard to assess.

When examination questions seek to elicit factual or descriptive responses, students will tend to adopt a surface approach to learning instead of deeper learning (White, 1992). Teachers in this case have attempted to move beyond this fact by helping students to think by asking them to state unanswered questions as a part of an end-of-course examination. These unanswered questions will hopefully have resulted from thought, review, and analysis of the subject matter and arose only after such thinking had been employed. The aim is to push students closer to the horizon of deeper learning by encouraging them to probe for further knowledge and reflect on their experience. This process should help equip them to better apply knowledge to new situations and to understand the context (Nandi *et al.*, 2000).

The assessment in which students were asked to state their unanswered questions took place one week after practical exposure. This would have facilitated the two tasks of reflection and stimulation of questions.

The study is limited by the short exposure of the students (one week) and as such short term and long term effects are difficult to determine. Useful insights have however emerged for more detailed investigation. It is difficult to assess the reason for no questions being submitted by 13% of students. This could be reflecting the effectiveness of the clerkship in addressing all of their particular issues or concerns, but perhaps more likely it could reflect limited engagement and stimulation by the material encountered.

## **Conclusion**

These 109 unanswered questions have highlighted topics within and around the family health curriculum. The distribution of questions among the emerging themes was relatively even and covered a mix of social, medical, and resource issues. These questions also provide initial insights into curriculum impact and potential effectiveness. Teachers could use these students' reflections to more effectively target explicit and implicit learning opportunities.

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