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Assumptions about Disease Treatment Challenged in a Family Health Clerkship: Views of First Clinical Year Medical Students

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ABSTRACT **Context:** *During a family health clerkship at the University of The West Indies, students are expected to acquire individual and community diagnosis skills and the ability to relate the two, as well as acquire knowledge of other community agencies involved in health care.*

Objective: *To determine the main assumptions related to disease treatment, which students have had to re-think after engaging in this clerkship.*

Methods: *End of clerkship assessments were carried out from two successive groups of third year medical students* (n = *64) at the University of West Indies, Jamaica. Students were asked to ''list two assumptions regarding treating disease that have been challenged by your experience''. A subsequent content analysis was done.*

Results: *Fifty-five students (86%) completed the assessment. All assumptions were listed* (n = *99) and similar issues were linked into emerging themes. Twenty-five groups of assumptions produced seven main themes: ''Issues related to compliance'' (27.3%), ''Patient's treatment is mainly physical'' (17.2%), '' Superiority of western medicine over alternative'' (15.2%), ''Patients' health seeking behavior and attitudes'' (12.1%), '' The extent of the contribution of social factors on health'' (12.1%) and ''Patients' knowledge and understanding of health'' (7.0%).*

Conclusion: *The majority of students examined felt challenged on three themes: relating to issues of compliance, treating the ''whole'' patient not just the physical, and the superiority of western medicine over alternative. The three most popular individual assumptions were; patients have a mindset that favours compliance, medication affordability does not affect compliance and treatment is independent of social and environmental conditions.*

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Context

The medical school at the University of the West Indies (UWI), Mona, Faculty of Medical Sciences, exposes students to community and social aspects of health and disease through a series of lectures and clerkship experiences throughout all 5 years of teaching. Students are expected to acquire and relate individual and community diagnosis skills, as well as acquire knowledge of other agencies involved in health care in the community. They are also expected to gain knowledge of determinants of health, such as environmental, lifestyle and health service factors.

The First Clinical Year (third year) clerkship represents the first exposure for UWI students to life in the community as it affects health and mediates disease outcomes. The curriculum includes one week of activities within a low-income inner-city community, where students are required to visit families, the family court and a general practitioner's office. During the family visit, they assess the impact of the illness on the family and the family's resources for coping. The clerkship aims to provide students first hand with an awareness of the many aspects involved in disease treatment within a community setting.

To advance teaching and learning, assumptions must be challenged. The very understanding and beliefs which students have need to be challenged, not just the conceptual frameworks at a cognitive level (Webster, 2002). A wide array of methods can be used to expose students to these challenges. These range from lectures, case studies, debates, simulations and actual exposure to real case material as occurs in this clerkship.

Although not formally assessed, it is apparent that students come to the clerkship with concepts or assumptions of health and disease treatment related to the patient and the community. These assumptions play a role in influencing the approach of the student to the patient and community.

In order to better understand the impact of the clerkship exposure and gauge the depth and spectrum of the learning process, the reflections of students about treatment of diseases were probed by asking about assumptions that were challenged during the clerkship exposure. In an elective programme in a US medical school, it was noted from students' reflections that 4th year medical students were able to combine their developing disease-based knowledge with an understanding of the social, economic and cultural factors affecting health (Wolff *et al*., 2001).

This paper describes the main assumptions related to disease treatment which students reported were challenged as a result of their first clinical year (year 3) clerkship experience.

Methods

The clerkship, which comprised a variety of seminars and field work activities, was carried out in semester one of students' first clinical year. Although these would have raised assumptions about disease treatment, no formal effort was made to help students become aware of specific assumptions before the end of clerkship assessment. End of clerkship student assessments were done under examination conditions. The assessments from two successive groups of third year medical students, totaling 64, were reviewed. As a part of this assessment, students were asked "list two assumptions regarding treating disease that have been challenged by your experience".

This study was driven by data collected thereby giving it an inductive approach. A thematic content analysis was carried out. The stated assumptions were reviewed, and a summarized version of each response was listed. The frequency of similar responses was ascertained. The emerging themes were extracted after careful examination of the responses. The stated assumptions were then re-examined and distributed among these themes. A final review of responses was done to ensure that the assumptions and themes were coherent. The frequency of assumptions in each theme was determined, and the themes were ranked (Figure 1).

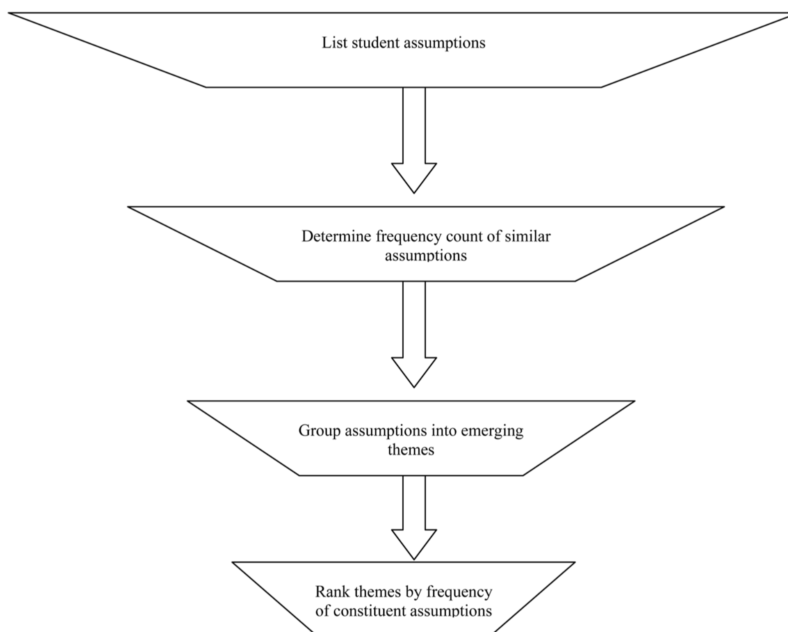

Figure 1. Flowchart showing schema for content analysis.

Results

Of the 64 students taking the assessment, 86% or 55 students answered the section of the assessment where they were asked to list assumptions. A total of 99 responses gave 25 different assumptions. Three assumptions were listed by one student, two assumptions were listed by 42 students, and one assumption was listed by 12 students. Seven main themes emerged. The main theme arising representing assumptions which were challenged was that of "*Issues related to compliance*" (27.3% of responses) (Table 1). Within this theme were 2 assumptions "Patients have a mindset that favours compliance" (14.2% of responses) and "Medication affordability does not affect compliance" (13.1% of responses).

The remaining themes that arose, placed in rank order, were "*Patient's treatment is mainly physical*" (17.2%), "*Superiority of western medicine over alternative*" (15.2%), "*Patients' health seeking behavior and attitudes*" (12.1%), "*The extent of the contribution of social factors on health*" (12.1%), and "*Patients' knowledge and understanding of health*" (7.0%) and "*Others*" (9.1%). *Others* included seven assumptions which were unrelated to the main themes.

Discussion

Despite an orientation to community health issues, the medical school at the University of the West Indies, Jamaica, still has a predominant hospital-based curriculum. It is known that the undergraduate training of doctors mainly in hospital settings results in graduates unfamiliar with personal, community-based care (WHO/WONCA, 1994). It is therefore important in these settings that efforts are made to expose students to the context of illness, so that a full and relevant understanding of disease can be gained. Assumptions influence thinking and decision making and also shape the formation of attitudes. Faulty assumptions about health and disease in the minds of physicians should be as much a concern as the practice of medicine on faulty scientific evidence, since the former can result in a fragmented approach to practising medicine.

The major category of assumptions that third year medical students had challenged was that of "*Issues related to compliance*" (27.3%). This might be a reflection of the lifestyle and habits of the students. Formulation of assumptions might bear some relation to personal habits and traits and may be skewed by personal reasoning. It is also possible that compliance is less than expected because of poor communication, hence poor patient understanding of the disease and/or its treatment. This inability can result from a cross-cultural phenomenon where a partition is present between the two groups. Difficulty in communication across this partition creates somewhat of a cognitive apartheid (McConnel *et al.*, 2000).

Table 1. Emerging themes from assumptions about disease treatment

Themes	Frequency (*n*)	(%)
*Issues related to compliance (27.3%)**		
Patients have a mindset that favours compliance	14	(14.14)
Medication affordability does not affect compliance	13	(13.13)
Patient's treatment is mainly physical (17.2%)		
Prescriptions alone are adequate	7	(7.07)
Treating the physical is sufficient	5	(5.05)
General practitioners cannot help the whole patient	2	(2.02)
Disease is mostly affected by the physical	1	(1.01)
Doctors and hospital are sufficient	1	(1.01)
Disease treatment is isolated	1	(1.01)
Superiority of western medicine over alternative (15.2%)		
Myths and beliefs were not prevalent	6	(6.06)
Western medicine is better than alternative	6	(6.06)
The use of home remedies was not prevalent	2	(2.02)
Acupuncture is ineffective	1	(1.01)
Patients' health seeking behavior and attitudes (12.1%)		
Patients are willing to change lifestyles	9	(9.09)
Patients are willing to seek health care	3	(3.03)
The extent of the contribution of social factors on health (12.1%)		
Treatment is independent of social and environmental conditions	12	(12.12)
Patients' knowledge and understanding of health (7.0%)		
Patients know about health	4	(4.04)
Patients understand the doctors' explanations	2	(2.02)
Patients know nothing about health	1	(1.01)
Others (9.1%)		
Resources are available	3	(3.03)
There is no assistance for the poor	1	(1.01)
Generic drugs work for all patients	1	(1.01)
Patient treatment involves individual doctor not a health team	1	(1.01)
The general practitioner sees a narrow range of illnesses	1	(1.01)
Drugs have no effect on social aspect of patient	1	(1.01)
Health education and promotion is done before needs assessment	1	(1.01)

*The percentages above were calculated based on the number of responses for each theme divided by the total number of responses.

The theme ranking second was ''*Patient's treatment is mainly physical*'' accounting for 17.1% of the responses. This may not only be a reflection of the students' personal thoughts but may show the level of exposure provided by the medical curriculum in previous years. Community health lectures are offered in

the first two years, and as such, the theoretical issues may seem far removed from practice in the minds of the students. It is not until a first hand encounter, such as this clerkship, that students' consciousness may be awakened to the importance of the non-physical aspects of disease treatment.

The third category was ''*Superiority of western medicine over alternative*''. Of the students 15.2% seemed unaware of the prevalence of use of alternative methods within the community and seemed to question its use as a valid method of disease treatment. Alternative practices, in this setting, may also be important to patients because of competing financial demands. Students are exposed to selected alternative methods during the clerkship. Invariably these include mainstream methods, such as acupuncture, but little on common folk remedies patients use in the community.

Of the students 12.1% were unaware of the extent to which social factors were involved in determining a patient's health. This theme reflects a notion similar to that of the second ranking theme ''*Patient's treatment is mainly physical*''. A lack of practical exposure to community and social issues may detach the student from such issues. The emerging expansion of the social role of the physician has been highlighted in the Caribbean context with a call for integration of traditional clinical skills with social intervention skills (Emery, 2000).

Another 12.1% were surprised by the *health seeking behavior and attitudes* of persons within the community, and 7.0% of the students listed assumptions related to *patient knowledge and understanding of health*. These are also related to and influenced by socio-economic conditions. This category can be used to assess the health promotion programmes within the community, as it reflects the health attitudes, awareness and knowledge, which are the targets of health promotion. Approximately 1/8th of the group were surprised by their encounter with poor health attitudes and behaviors. It is possible that the efficacy of the current programmes within that community need to be assessed.

Assessing the assumptions of students is important if real change is sought to refocus the medical school curriculum to prevent and remove false assumptions at an early stage. It is only as students rethink their assumptions in action that they can change (Freire, 1993), regardless of whether this thinking is superstitious or naïve. It is important to gain insights as to where students are in the learning process and their understanding of complex social issues. This orientation helps to develop a suitable learning platform for the development of the so-called ''tomorrow doctor'' with competences to understand and address issues related to social health (Bryant, 1993).

Allowing students to focus their reflections at the end of the clerkship allows for some understanding of how much deeper, independent thinking has taken place during the clerkship as opposed to simple consumption of ideas from tutors.

As a result of the study being carried out under examination conditions, students may have felt that they were forced to respond for credit, therefore

thinking and creating assumptions instead of responding based on actual opinions. Alternatively, examination conditions may have led students to delve into their minds and really think about what assumptions they had challenged. The study may have omitted other assumptions that students may have had but were unable to state, since only two were requested. This may have resulted in only main challenged assumptions being listed, therefore giving researchers with only the most important issues.

Some assumptions were vague and had to be interpreted by the researcher, forming an area within the study that may question validity. Content analysis is acceptable in medical education research (Coles & Grant, 1985). But to be able to explore in depth some of the assumptions that were challenged, a focus group strategy may also be useful. This should stimulate discussion that allows for the examination of the emerging themes in more detail. It may be useful in the future to integrate such a strategy into an end of clerkship debriefing process to reinforce the learning that has occurred.

There is a need to look at alternative curriculum approaches in response to these challenged assumptions. For instance, issues regarding compliance and treatment of the whole patient can be specifically highlighted for discussion in classroom seminars. In addition facilitating student contemplation of their possible assumptions at the beginning of the clerkship may also be beneficial. It is possible that exposing students more gradually to these aspects of community and social health will reduce some of the apparent surprise. In addition, students need to retain the knowledge gained to ensure that the programme remains a valuable contribution to their learning experience. Changes brought about by undergraduate family care programmes do occur but are transient if not fully supported by the remainder of the curriculum (Silberstein & Scott, 1978). If curriculum exposures subsequent to this rotation focus on the important elements of the clerkship, then the knowledge and insights previously gained may be carried along and reinforced.

Whether students have been challenged to the point where there will be long term learning is questionable and cannot be determined in this study. It would seem, however, based on the reflections of students in this clerkship, that they have operated between surface learning (simple completion of the expected tasks) and deeper learning where the intention was to understand issues. Hopefully with subsequent exposures in the medical school and with the appropriate environment, students will move to a more strategic learning posture, where they can assess a situation and employ appropriate approaches as necessary.

Conclusion

The majority of students examined felt challenged on three themes: relating to issues of compliance, treating the ‘‘whole’’ patient not just the physical, and the

superiority of western medicine over alternative. The three most popular individual assumptions were: patients have a mindset that favours compliance, medication affordability does not affect compliance and treatment is independent of social and environmental conditions.

References

BRYANT, J. H. (1993). Educating tomorrow's doctors. *World Health Forum*, *14*, 217–230.

COLES, C.R. & GRANT, J. G. (1985). Curriculum evaluation in medical and health-care education. *Medical Education*, *19*, 405–422.

EMERY, H. (2000) Challenges facing the physician in the 21st century. *West IndianMedical Journal*, *49*, 194.

FREIRE, P. (1993). *Pedagogy of the Oppressed*. New York: Continuum.

MCCONNEL, F. B. & MICHIE, M. (2000). *Compliance in Health: Learning Lessons from Indigenous Science Education*. Paper presented at AMA conference: Learning Lessons: Approaching Indigenous Health through Education, 2000.

SILBERSTEIN, E. B. & SCOTT, J. C. (1978). An evaluation of undergraduate family care programmes. *Journal of Community Health*, *3*, 369–379.

WEBSTER, S. (2002). *Existentialism: Providing an ideal framework for educational research in times of uncertainty*. Paper presented at the Australian Association for Research in Education Conference.

WOLFF, M., YOUNG, S. & MAURANA, C. (2001). A senior elective: Promoting health in underserved communities. *Family Medicine*, *33*(10), 732–733.

WHO/WONCA (November, 1994). *Making Medical Practice and Education More Relevant to People's Needs: The Contribution of the Family Doctor.* A working Paper of the WHO and the World Organization of Family Doctors, from the Joint WHO-WONCA Conference in Ontario, Canada.