

International Health: A Manual for Advisers and Students

By Christopher Krogh, MD, MPH

With Ron Pust, MD

**The Society of Teachers of Family Medicine
International Health Committee**

Published by

The Society of Teachers of Family Medicine
11400 Tomahawk Creek Parkway, Leawood, KS 66211
913-906-6000

© December 1990
ISBN 0-942295-22-6

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DEDICATION TO CHRIS KROGH

Many of the lessons that we have learned as international physicians are epitomized in the dedicated career of Christopher Krogh, MD, MPH. A board-certified family physician and a graduate of the International Health Preventive Medicine residency at Johns Hopkins University, Dr. Krogh saw in his academic career at the University of Minnesota that mentoring students for international health and for careers among our own underserved is "of one piece." Joining the United States Public Health Service Indian Health Service, Dr. Krogh applied these mutual lessons in his work in the maternal child health program of the Indian Health Service Dakota area. In making his lonely monthly rounds of these High Plains to serve the women and children, the most powerless members of one of our most remote Native American populations, Dr. Krogh perished, along with three colleagues, in an aircraft accident in a snowstorm on February 24, 1994. North America's future physicians and its first inhabitants have both lost an unassuming but highly dedicated servant-physician. Those of us who educate for careers in underserved areas have lost a colleague who best lived out the integration of international and domestic health care. Chris educated, entertained, and inspired us all. STFM and this manual's secondary author, who served a sabbatical under Dr. Krogh, dedicate this updated edition to his memory.

*—Ron Pust, MD
January 2000*

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PREFACE

This manual has been written for faculty who wish to advise students about international electives. It reflects our own experience with international student and resident rotations, as well as concepts and recommendations which have been developed by International Health and Cross Cultural groups within the Society of Teachers of Family Medicine (STFM). This manual is primarily targeted to faculty, since in the case of international rotations—even more than on other types of rotations—faculty have an unusual responsibility for the well being of the student, the content of the experience, and the impact on those with whom the student will work.

We recognize that, in some cases, students or residents, rather than faculty, may use this manual. Although some of the issues addressed here - such as curriculum - may not be familiar to many students, their importance should become apparent as these sections are read. For purposes of this manual, the term “student” will be used to refer to students, interns, and residents, since the common purpose of all three is to learn. It might be argued that some faculty are also “students” (and some students are also teachers) but the term “faculty” will be used in this manual to refer to those individuals whose formal role is to advise and teach another person. The term “elective” is used in this manual to refer to international training experiences. This term is used because, with rare exceptions, international experiences have not been institutionalized in domestic (United States) medical schools. However, we would argue that, in the long view, international study should not necessarily be synonymous with “elective.”

HOW TO USE THIS MANUAL

The rationale for organizing this manual around checklists is twofold. First, international electives are different, in both form and substance, from other experiences for which students seek advice; and checklists may serve as reminders of those crucial differences. The second is that most of us who advise students going abroad, do so infrequently enough that a checklist is helpful as assurance that nothing is overlooked.

The manual consists of three sections. The first examines international health as a component of a medical education, and the unique role an advisor may play in such training. The second contains four checklists, each followed by a section in which the items on that checklist are described in more detail. The third presents feedback from students who have undertaken such experiences.

The four checklists which form the heart of this manual are designed to be used, directly or indirectly, as student and advisor work together to plan an international elective. The first checklist is for use when a student is beginning to think about the possibility of study abroad. The second checklist helps to develop a plan for a specific experience, and the third confirms details of that experience. The fourth checklist is for use after the student returns home.

None of the checklists is exhaustive. They are based on ideas and information from a number of sources, but cannot provide all answers for all settings. Instead, they are meant to be modified, supplemented, and used to the degree they are useful in a given case.

We suggest that you start by reading through the manual once in order to understand the checklists. They are not intended as a set of questions with correct answers! Rather, the intent of the manual is to present several issues which may arise, and at least one perspective on each issue. Some of the viewpoints expressed in this manual were deliberately included to provoke a response—with the intent that, in agreeing or disagreeing with ideas presented here, readers will more clearly recognize their own points of view.

It is hoped that you, as a user of this manual, will comment on this first edition. If you would like to write or rewrite something, or present a counterpoint, please do so. If your material is used in a future edition, we will credit you. Such an approach is, in our view, consistent with the basic philosophy of the STFM, and certainly, on a subject such as this, collective wisdom is preferable to that of a few.

—Christopher Krogh, MD, MPH, Minneapolis, Minn

INTRODUCTION

THE ADVISOR'S ROLE IS UNIQUE IN INTERNATIONAL ELECTIVES

Unlike other optional experiences during medical school, international ones involve a number of elements which are unfamiliar not only to students, but also to the faculty who advise them. Yet international electives are all too often arranged and carried out in a “hit or miss” fashion which would be unacceptable in domestic electives—despite the very real possibility of unforeseen illness, injury, misunderstanding or other undesired outcomes.

When a student wants to schedule a training experience abroad, the advisor may, directly or indirectly, discourage the idea. If the advisor is supportive, unfortunately, all too often s/he simply tells the student “Go ahead, make the arrangements, and get a letter from someone telling us what you are going to do and who will supervise you.” Approval or disapproval of the experience may then be decided on this scant evidence alone—which addresses few or none of the elements that may actually impact upon the student’s experience. Potential benefits are left to chance, and student and advisor find themselves “at risk” for a number of adverse outcomes which might have been foreseen.

Often a letter from the prospective “on site” supervisor is not forthcoming by the date on which the student must confirm final arrangements. Even if a letter is received which does seem acceptable, cultural and political subtleties may profoundly affect the content and meaning of such a letter, as discussed in a later section of this manual.

Thus, the very circumstance in which structure and careful arrangements are most needed—the planning of an international elective—may be one in which these are most lacking. This manual is intended as a guide in developing them.

INTERNATIONAL ELECTIVES INCLUDE A NUMBER OF ELEMENTS THAT ARE USUALLY NOT ADDRESSED IN OTHER TYPES OF ROTATIONS.

These include:

Motivation

Normally a student participates in training experiences in order to graduate; to meet department or medical school requirements; to master basic skills; or to become a competent physician—but an international elective is almost always done for reasons in addition to these. Such reasons, and their implications, will be discussed in a later section.

Curriculum

Students and residents may give little thought to the formal curriculum which underlies the experiences in which they participate. International work, however, demands basic sciences, knowledge and skills which lie outside the conventional medical school curriculum. These include public health, health services research, community health, anthropology, and tropical medicine.

Safety

Personal safety and health, rarely an issue on other types of clinical rotations, become major considerations in international study. The author’s own work in rural India was cut short by an automobile accident that left him hospitalized in a remote Bengali hospital. Although such developments may represent a powerful educational experience, this is not a recommended way to study health care in other countries.

Impacts upon the community in which the student works are rarely considered in domestic electives, for the presence of students is more or less expected in domestic teaching hospitals and clinics and communities have adjusted to this. In settings outside the United States, however, the presence of US medical students may have profound implications and consequences.

A student planning an international experience is likely to encounter at least three different points of view regarding the merits of such work:

A non-internationalist perspective—In many US settings, far from international boundaries, international health may not be identified as a crucial element of a medical education. If one believes that United States health care is the best in the world—or that, if other peoples and communities lived as we do, they wouldn't have all the problems they have (this belief is referred to as “ethnocentrism”)—then international study may seem largely irrelevant to the training of US practitioners. Some physicians believe that what goes on even outside one's local environment may represent an inappropriate distraction for a student. In cases where an elective at a rival hospital across town is discouraged, international study clearly may not be approved by local faculty.

A broader perspective—Ron Pust, MD, who coordinates the predoctoral program at the University of Arizona, argues that in the face of a domestic oversupply of physicians, and a desperate shortage in other parts of the world, it is increasingly difficult to explain why the United States does not train physicians who are capable of practicing, at least for a portion of their careers, abroad (JAMA, 1984). This vision, however, is not widely acted on in the United States; internationally relevant training is in short supply within the United States, and financial backing, loan deferments, and referral networks are difficult to find.

A global perspective—Dr. Carl Taylor, Professor Emeritus in the Department of International Health at Johns Hopkins University, argues that many, if not most, of the significant developments in world health today are taking place outside of the United States. Such a viewpoint suggests that, far from taking our own “brand” of medicine to other countries, we should be learning from others and applying their lessons at home. In many countries, community health, which enjoys widespread specialty status except in the United States, serves as a framework for health care systems and strategies. Appropriate technology, participatory care, and equal access are community health keywords which have yet to be fully operationalized within the United States.

US students may find that the first viewpoint just discussed, which might be described as a ‘non-internationalist perspective,’ is abundantly represented while the other two are relatively rare. Outside the United States, however, the reverse is likely to be true, and this constitutes a powerful first lesson for a student studying abroad.

WHAT IS INTERNATIONAL HEALTH?

There are probably as many definitions of “international health” as there are definers. It literally means health care involving more than one nation. Such a rigid definition, however, tends to exclude as irrelevant *most* of the domestic activities and training in which United States medical students participate, unless they happen to take place in another country. Yet students intuitively know that much of their training is in fact relevant to international work. From a more flexible perspective, a defining characteristic of international health is the necessity of operating under the rules of a government other than one's own. This (along with political, legal, cultural, economic, social and logistic realities) determines what is possible and permissible in a given setting, and represents an essential defining characteristic of international health.

From this perspective, the care of very recent immigrants to the United States, whose illnesses, health needs, expectations and assumptions are still those of their nation of origin, is *highly* relevant to international health. The same may be true of certain experiences offered through the Indian Health Service, the CDC, or some community, or travelers', or campus clinics. Conversely, visiting another country and simply practicing one's own specialty, in United States style, without regard to local or national needs or expectations, is not truly “international health” if the local setting and context have not been considered.

Some cynics define international health as “going to warm places in winter and cool places in summer.” Such a definition raises interesting questions concerning the motivations of persons who wish to work abroad. The question of motivation will be the topic of an entire chapter later in this manual.

INTERNATIONAL HEALTH AS A CURRICULAR ELEMENT

In the past, international health opportunities have depended to a great extent on chance. The identification of a site, or a person with whom to work, often depended, and still does, on word-of-mouth recommendations from others whose motivations, interests or personality might differ from one's own. Projects were often conceived "in a vacuum," sometimes with little relation to what was actually possible in a given country or setting, and having more to do with a student's own aspirations than with any perceived need on the part of a host community.

Even when an elective was thoughtfully planned, the quality of the experience might be unpredictable. At best, the experience could be educational for the student and/or beneficial for the host. At worst, the student might lose his or her idealism, confidence, health or life; or, too often, the student blithely returned home without realizing that lasting damage or misunderstanding had been left behind.

To this day, international electives may involve groups of faculty and students who travel together to shake their heads over the ways other people live or to practice United States-style medicine in settings where it is neither appropriate nor sustainable. In such electives, little local institution building or enrichment may take place, and the visitors may leave a community more impoverished than they found it. Students returning from such an experience may, after some reflection, describe it as disappointing; but this seems to do little to deter new students from seeking identical experiences the following year, preferring such experiences to none at all.

PROTOTYPE PROGRAMS

In an effort to introduce structure, a number of prototype international health training programs have emerged. Prominent among these remain the wide range of training programs, of varied lengths and content, of the London School of Tropical Medicine. Closer to home, one of the major difficulties facing programs in international or tropical medicine has been the unreliability of funding.

Some disciplines other than medicine (such as agriculture, nutrition, and the social sciences) have in many cases done perhaps better than medicine in maintaining an international perspective. One reason medicine fares poorly may be that the "biomedical culture" itself, into which medical students are trained, prescribes specific behaviors, attitudes and beliefs, including the perception that medicine is moving from superstition toward science and that modern Western medicine offers "correct" answers for diagnosis and treatment. Such viewpoints, obviously, may affect the willingness and ability of medical schools to develop programs which fairly present diverse cultures and health beliefs.

For a time, the National Council for International Health (NCIH) in Washington, DC, worked to develop a centralized clearinghouse which could match students, faculty, available funds, and specific international sites. Their efforts slowed for two reasons. First, the clearinghouse turned out to be more work (because there was more demand) than had been anticipated. And second, adequate "quality control" proved difficult in the absence of a means to directly investigate each student and site. More recently, NCIH has provided computerized job lists, while recognizing that full quality control cannot necessarily be achieved from a distance.

In general, printed lists, along with word-of-mouth recommendations as to sites and advisors, remain the norm for students in search of international experiences. The market is 'open' for anyone—perhaps you, the reader of this manual—who is willing, energetic and innovative enough to find effective means of matching students, advisors, supervisors, and sites.

THE EXPERIENCE OF FOREIGN STUDENTS STUDYING IN THE UNITED STATES

The efforts by students of medicine from other countries to come to the United States for training illustrate some of the complexities of international study. Suspicion about the motivations of students who wish to study in the United States (for example, do they truly intend to return to their own country afterward?) promotes an undercurrent of distrust. Language and cultural barriers, often viewed as incidental difficulties for US students going abroad, emerge as major concerns when a foreign student comes to the United States.

If our faculty and students feel that we in the United States have little to learn from students who trained in other parts of the world, then obviously there is little opportunity for true peer relationships or mutual gain.

A student who is thinking about study in a foreign country might well begin by getting to know foreign students who are studying here. This may offer several benefits in addition to friendship. It may familiarize one with the differing perspectives of host and guest in a cross-cultural setting; it may also lead to valuable contacts in other countries. If a student plans to study abroad, but shows little interest in getting to know foreign students who are studying here, an advisor might reasonably open an interesting dialog by asking why.

Most guidebooks for students going abroad (including this one) focus primarily on what the *student* is thinking and feeling and doing, rather than on the bulk of people involved in the relationship (ie, the host community.) However, when one considers a foreign student who is studying in the United States, it becomes obvious that from the host's perspective, the student's performance, acculturation, and contributions seem at least as important as the student's feelings about the experience! This observation may provide some insight as a US student undertakes an experience abroad.

PREPARING NORTH AMERICAN HEALTH PROFESSIONALS FOR ROLES IN INTERNATIONAL HEALTH (BY RON PUST, MD)¹

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Dr. Pust, along with Susan Moher, MEd, has developed an international health curriculum based at the University of Arizona. The need for systematic planning is even more compelling in international health than in many other fields since international rotations, while consuming valuable time and resources, are often not planned for maximum educational benefit. Specific educational and personal objectives, complex logistics, and cross-cultural sensitivity are vital in such a multifaceted educational experience. The preparation of US health professionals for roles in international health can be broadly viewed as a unified process with three major components which, when integrated and evaluated by a counterpart clinician in the developing nation, become a dynamic system for evaluation and constructive feedback (See Figure 1.)

Curriculum

A curriculum is a longitudinally sequenced integrated course of study preparing the learner for competence in a specific goal area. Perhaps the most neglected of the three elements in the educational system here described, the curriculum should first define appropriate roles that the health professional, whether learner or certified professional, will fill in international health experience, and then it should prepare the novice as specifically and realistically as possible for that role. Expansion of these principles and a suggested curricular outline are presented in the next section.

¹Ron Pust, MD, is an associate professor of Family and Community Medicine, University of Arizona, Tucson, Ariz.

PREPARING US HEALTH PROFESSIONALS FOR ROLES IN INTERNATIONAL HEALTH

Figure 1. The 4 C's—components of a System of Preparation for International Health
[FIGURE 1 IS INCLUDED IN THE PRINTED VERSION OF THIS PUBLICATION, AVAILABLE FROM STFM.]

Career Development Advising

Since international health is not a specific or organized specialty in any of the traditional health professions, advising for career development—or even for an initial international experience—is more important than in the traditional disciplines in which there is a conventional wisdom and an educational and career structure. The advising process in international health should be highly personalized, yet extremely rigorous. Individualization is the essence of any advising process. Because the field of international health is diversely defined, the advisor must seek with the advisee to clarify the personal educational goals of the experience and the need for a preparatory curriculum. By using anticipatory guidance, the advisor can promote independent problem solving in conjunction with the counterpart clinician on site.

Obviously, the advisor will emphasize varying aspects of the preparation process, depending on the past educational and international experience of the advisee, as well as the site at which the advisee anticipates serving. This advising and career development process has been the subject of previous articles and informal workshops; it forms the major portion of this manual.

The crucial role of community counterparts and clinical sites in developing countries

While the advising process is the essential bridge between formal preparation and the actual clinical learning experience, the counterpart at the developing country clinical site, whether a national of that country or of North America, has the most crucial role in the entire system. As the diagram implies, the counterpart relates both to the faculty or professional and the student and to the host country institutional site, whether or not formally affiliated with the North American educational institution.

Because the need for integration between community and clinical medicine can often be so dramatically demonstrated in developing nations (although it is at least as important in North America!), it is vital that an international clinical site include community and public health program responsibility for the entire catchment area of the clinical facility. Thus defined, the ideal site will most often be a rural or semi-rural district or provincial hospital at the middle level of the health care system existent in most developing nations. Indeed, it is at this level that the primary care “Health-for-All” approaches recently popularized by the World Health Organization are destined to succeed or fail.

In special circumstances, a larger hospital (e.g., for those who wish to be secondary care specialists) or more peripheral levels of the system (e.g., those wishing to emphasize village-based or medical anthropology approaches) may be appropriate sites. Regardless of the level chosen, however, the importance both of the curricular preparation and of the counterpart's guidance remain paramount.

International Health In Medical Education

While this manual can point to some criteria for the choice of an ideal international site, it is beyond its scope to provide detailed listings. Several such listings are available; some are periodically updated and are available both to advisors and to advisees.

* While not ideal for learning from an organized community health viewpoint, peri-urban “squatter” settlements and refugee camps offer special challenges to specific students, hopefully those who already have had community/public health experience.

CURRICULUM IN INTERNATIONAL HEALTH

Emporiatics, or the science of travelers' health, assumes domestic health importance as North Americans increasingly travel at ever greater speeds to more diverse destinations. If not fully protected, they may return with diseases uncommon or unknown in North America. Virtually all primary care providers may be consulted by the travelling or returning public (Pust, Peate, and Cordes, 1986, JFP.' While the majority of US physicians working outside of the United States are in clinical roles (Baker T. in AJPH, 1984,) there has been little or no integrated preparation for this role that could be called a curriculum. Rather, various aspects of the relevant knowledge base are found in schools of public health, textbooks and courses in tropical medicine, management, etc. Before proposing a content for such a curriculum, however, we may be asked to justify the inclusion of any international health curriculum in US health professional schools, whose perceived mission is often limited to domestic medical problems. Thus, we will raise basic curricular questions before discussing appropriate content.

Eliminating ethnocentrism in cross-cultural care is a widespread need in North America, with the influx and diffusion of a new generation of immigrants, largely from developing nations. Thus, while a majority of US health care providers do not go to the developing nations, increasing numbers of their citizens are migrating here. In either the developing world or in the North American setting, American clinicians need to be versed in the cultural

International health is a curricular need common to all North American clinicians for at least three reasons.

Why International Health in the Medical Curriculum?

Traditions which affect the presentation of illness in such patients. Conversely, the North American clinician, whether a traveler or not, can learn from and be enriched by these cultural values which often contribute to the rich interaction of extended families and a community that is truly therapeutic for its group members.

Equity in Health Care Distribution demands that North American providers consider their responsibility to medically underserved populations. With the abundance of American physicians, those persons who remain underserved in the United States are increasingly members of "structurally underserved" populations with cultural and economic, rather than geographic, barriers to access. It is logical and ethically appropriate to extend this responsibility for equity to the most underserved of the world's citizens, those residing in developing nations.

Core Content of the International Health Curriculum. Beyond these three reasons, there is a specific methodological content in international health that has application in domestic practice. Clinically, decision making under resource constraints is at the core of the content common to practice anywhere, whether those constraints arise from domestic cost containment efforts or from an absolute lack of resources in the poorest nations.

Faculty: WHO Should Teach International Health?

Experienced community-oriented clinicians should form the core—and preferably the entire faculty of any curriculum seeking to prepare its learners for the clinical/community role in international health. In addition to their clinical experience in developing nations, these clinicians need three other "Ems": enthusiasm, engagement, and evaluation. Enthusiastic wisdom—a sense of "realistic idealism"—is a prime component in the mentor relationships of successful faculty role models. The core faculty should be fully engaged in setting the overall philosophy and also the relationships between each part of the course and curriculum, as well as being expert in their own areas. Finally, each faculty member, as well as the course as a whole, needs to be subjected to a rigorous and ongoing evaluation process, with results forming a feedback loop for improvement and, if necessary, a "final E"—the elimination of content or individual faculty which prove unsuccessful.

An interdisciplinary approach is indispensable in demonstrating our interdependence in such a diverse field as international health. While the curriculum should ideally be directed by a generalist with broad experience and knowledge, every effort should be made to encourage interdepartmental collaboration with all primary care and other appropriate clinical specialty departments. Where the overall cohesiveness of the curriculum can be maintained, it is likewise ideal to go beyond medicine, especially to nursing, dentistry, and other clinical disciplines. Individual faculty in non-clinical fields who have Third World experience relevant to grass roots clinical and community international health—eg, public health and epidemiology, health education, anthropology, economics, women and/or minority studies, etc.—can lend unique and invaluable perspectives.

Finally, of course, faculty need to be rewarded. It is our strong feeling that faculty must be chosen by the above criteria and must interact intensively with students who are eagerly anticipating fieldwork in international health. These faculty will then be enthusiastic and the students will be involved and focused. Many topics of faculty expertise (eg, parasitology, community epidemiology, and prevention) may find an enthusiastic student reception for the first time!

Students: Who Should Learn? The prime prerequisite for the curriculum we describe here is ongoing active planning for an international experience in the immediate or foreseen future. The anticipation of this experience is a highly motivating and focusing factor. Like the faculty, students are enthusiastic, engaged in their anticipatory planning, and willing to evaluate the faculty and be evaluated by them. Finally, each person should display an active appreciation of the interdisciplinary team approach that regards every member of the health care team and the community, whether “professional” or not, as equal, vital, and an interdependent group contributing to the common goal of health.

WHEN? While field experience can be valuable at any stage of medical or clinical education, it is our feeling that at least basic clinical skills (ie, the completion of the required clerkships) are prerequisite to the full learning value of the field experience for the future clinician. This field experience in the clinical years further reinforces the relationship (and tension!) between the community and preventive orientation, often taught earlier in the medical curriculum, as well as the hard core clinical skills expected of any health care provider in resource-poor settings.

Where possible, the curriculum in international health can be embedded within the standard curriculum, as well as offered electively, either in or parallel to the curriculum. As an example, at the University of Arizona College of Medicine there are three phases. The *interest-building phase* includes four hours of small group instruction focusing on case-based epidemiology and demographics within the community medicine segment of the interdisciplinary Preparation for Clinical Medicine course. At the same time, noon seminars from fourth-year students returning from their international clinical preceptorships give these students concrete examples of the culminating experience toward which the curriculum builds. The full-time, three-week *orientation course* is given in July following the completion of required third-year clerkships. This course is a specific orientation to the international clinical preceptorship, which can then follow at any point in the fourth year—or later if necessary.

The integrative experience is a preceptorship at a site specially chosen to provide appropriate supervision and to demonstrate the problems and also the clinical and community roles needed for health care in developing nations. Where practical, a topical study and/or research project that has the prior approval of and utility for the field site and its counterpart preceptor can be an integral part of this experience. To fully benefit from the preceptorship, we recommend a minimum of eight (preferably 10 or 12) weeks on site after the orientation course and the personal preparation for the field experience which forms the major subject of this manual.

HOW should we teach international health? Certainly, any curriculum should be sequenced, iterative, and progressive, as alluded to in the previous paragraphs. More important is the issue of how to engender the knowledge base, cross-cultural attitudes, and specific clinical and community medicine skills needed in a literally and totally foreign health care setting before the learner leaves North America. Personal and clinical involvement in and with domestic underserved and cross-cultural communities are an ideal experiential preparation. However, whether or not conducted in conjunction with such a domestic field experience, the core content of the formal curriculum should be problem based and preferably taught, at least in part, in small interactive groups. This allows for the case-based simulations that are an ideal method for teaching a problem-solving approach that works in unfamiliar and often daunting field settings.

While the case-based approach is obviously applicable at any point after the completion of basic clerkships, it can be successfully utilized, even with clinical examples, earlier in the overall curriculum, as is done at McMaster, New Mexico, Southern Illinois, and Harvard medical schools, among others. Such clinical cases, often based in the faculty's experience, not only lend credibility to that faculty, but also provide a sounding board for raising a myriad of clinical and cross-cultural issues, enlivening both the group and the faculty facilitator.

WHAT Should Be the Core Content of International Health? While there may be debate as to the details, we believe there is a growing consensus that the core content should be based in a dynamic problem-solving approach to learning the new roles needed by a Western healer in the many regions and nations of the developing world. Such a conceptual model is diagrammed in Figure 2.

What Health Problems are at the Core of the Curriculum? While the problem-solving, priority-setting *process* is an ideal approach to knowledge and skill acquisition in any field, what is the *content* of the core problems of health in the developing world? Here too, there is an increasing consensus that problems fall into three major areas: population, nutrition, and clinical disease, especially infections, though not necessarily the classical "tropical" diseases.

How shall choices be made for inclusion of some disease entities among the myriad which plague these nations?

One answer is the emphasis on those most soluble with existing and adaptable technology; ie, the approach proposed by Walsh and Warren as "selective primary care" (New England Journal of Medicine, 1979; 301:967-974.) Superimposed on this selectivity based on technology is the priority on child survival, and therefore on the health of the mother-child dyad, as championed since 1982 by UNICEF. Interwoven through this process of prioritization is the real life issue of who is setting the priorities - the international agencies or the communities themselves?

Any course orienting the learner to a specific future situation should emphasize roles appropriate in those settings. Thus, the knowledge, attitudes, and skills needed for these roles should form an overt aspect of the curriculum, preferably taught through interactive, group-based methods. A suggested broad outline of a core international health curriculum, based on courses offered at the University of Arizona, is listed in Table 1.

TABLE 1: A "CORE INTERNATIONAL HEALTH CURRICULUM

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OVERVIEW: HEALTH IN DEVELOPING NATIONS

POPULATIONS

- EPIDEMIOLOGY FOR HEALTH CARE AND MANAGEMENT
- CLINICAL MATERNAL HEALTH
- FAMILY SPACING
- OBSTETRICS

NUTRITION

- MEASUREMENT AND MANAGEMENT

INFECTIOUS DISEASES

- PROGRAMS VERSUS MAJOR KILLERS OF CHILDREN
- TROPICAL INFECTIOUS DISEASES

HEALTH CARE ROLES

- TEACHING HEALTH WORKERS
- VITAL ROLE OF WOMEN
- DOCTORS' CLINICAL ROLE
 - HOSPITAL AND COMMUNITY
- CROSS-CULTURAL ROLES
 - ETHICS/POLITICAL/TRADITIONAL MEDICINE

REGION-SPECIFIC PREPARATION:

- PREPARING FOR INTERNATIONAL WORK
 - MEDICAL PROBLEMS OF TRAVELERS AND REFUGEES
 - CAREER AND EDUCATION OPPORTUNITIES
-

INTERNATIONAL HEALTH IN THE THIRD WORLD

A Functional Synthesis of Figure 2. Conceptual model of an integrative problem-solving approach to the training of international health care providers (University of Arizona) [FIGURE 2 IS INCLUDED IN THE PRINTED VERSION OF THIS PUBLICATION, AVAILABLE FROM STFM.]

A final and transition topic in any such orientation course is the personal preparation for the specific field site. It is here too that this section ends and makes the transition to the major topic of this manual, the specific role of the advisor in preparing the student for the integrative international field experience.

WHEN IN MEDICAL TRAINING SHOULD A STUDENT PLAN TO STUDY ABROAD?

DURING MEDICAL SCHOOL?

Opinions seem divided over this question. Some spokespersons argue that student's interests should be encouraged at whatever point in training they may arise. How well this can be accomplished depends, of course, on local resources and environment. Others insist that all rotations, including international ones, should conform rigidly to the formal curriculum of the student's own school. The summer at the beginning or the end of fourth year is probably the most widely acceptable time for a student to plan to go abroad.

The question of timing involves two primary issues. Many students entering medical school display a lively interest in community and international issues. Depending on circumstances, this interest or may not be actively nurtured by faculty—one would hope that it will be. That is a separate question from what courses a student takes and when s/he takes them. It is possible to keep a student's interest alive while still complying with the requirements of a rigid curriculum; the wish to encourage a student's wider interests does not in itself necessarily prescribe a particular sequence of rotations. It is also possible to stifle a student's enthusiasm even in a flexible school. In other words, the wish to encourage a student's wider interests does not in itself necessarily prescribe a particular sequence of rotations.

Likewise, some third year students want to "go to England and look at medicine under the National Health Service." A student at that stage of training, who has not yet learned diagnosis or treatment, really is not able to critique other physicians' clinical care. Unless the student has a background in economics, it is unlikely that s/he can assess the health care delivery system of a foreign country and society either. To prepare that student for that experience requires extra effort by advisor, student, and faculty.

Students on an international elective are probably looking for something they haven't found at home (please see the section on 'motivations'). To the extent that such needs can be accommodated under appropriate supervision, international experience may provide a rich opportunity for curricular innovation. This, however, requires resources, people, and communications that are not always available, and prototype clinical experiences for first and second year students are few and largely experimental in this country. If one does not have the resources at hand to pursue such innovation, it may be most realistic to recommend that medical students select international experiences that contribute to their knowledge and skills in those established curricular areas—the basic sciences or physical diagnosis—that they are already studying at home.

DURING INTERNSHIP OR RESIDENCY?

In internship, the primary emphasis is on assessment (differential diagnosis and clinical decision making) and management of illness. At this stage, a student may benefit greatly from international experiences that present different options in diagnosis and treatment from those they have previously encountered. At this stage of training, a student also may have skills to deal with the emergencies that invariably present if one is in any setting long enough: appendicitis, prolonged second stage of labor, compound fractures, or an ill infant. Although "larger" questions such as cultural or political aspects of health care may be of interest throughout training, students near the end of residency and fluent in medicine may be particularly well positioned to examine them.

FOLLOWING RESIDENCY?

With additional years of experience (practice, fellowship, public health training, or a period in the CDC or Indian Health Service, for example) the capabilities of the student, and the opportunities for service, become greater. As one gains experience, one develops relationships and a reputation that may lead to further opportunities for international service. Periods of international service alternating with domestic practice are, furthermore, becoming an accepted "model" for domestic group practice.

Problems of funding become more manageable after student loans have been repaid and an income established. Questions of funding may represent one compelling reason to defer an international experience until residency or later. During residency, a salary is coming in, and insurance (including malpractice insurance) is likely to be at least partially covered. Some residency programs are flexible enough to allow international experience; a few openly offer or encourage it.

Some students feel a need to complete any international experience early, “before getting married”, in the anticipation that it will be necessary to settle down in married life. One objection to this rationale for “bachelor” experience is that one learns a lifestyle during medical training. If important aspects of that lifestyle evolve around being unmarried or footloose, it may prove difficult to modify this should marriage ensue; so this argument for early experience is not very compelling.

In summary, those medical students who are motivated toward international work often feel a great urgency to pursue this interest—“if I don’t go now, I never will,” or, “I want to find out early on what training and resources I am going to need.” Hopefully, however, the preceding arguments will suggest that international experience is only enriched by waiting, and that options multiply and liabilities lessen with time. No student should pursue an ill-conceived experience, or go overseas on short notice or with insufficient planning, simply because “this may be the only chance to do it.”

PREPARATORY TRAINING FOR INTERNATIONAL WORK

The long process of medical training is predicated, in part, on the premise that in order to do anything, one must first be taught how to do it. True or not, this idea is so often reinforced in the long course of a medical education that students whose future plans include international work typically begin by asking what courses they should take and what medical specialties to consider in preparation.

Typical answers are of four types. Some advisors give a student specific instructions, as though there is in fact a “correct” sequence of training for an international career. (This may or may not be the path the advisor followed.) Others give the opposite advice: that there is no way to prepare for something so unpredictable and that one must simply go, and learn by experience. A third common form of advice is that international health, like any form of community medicine, depends on whom one knows and what political connections one can make, not on courses or specialty per se. A fourth consideration, suggested by Ron Pust, is that students may be wise to select training that optimally prepares them for practice in the United States, where credentialing and training requirements are most rigorous, and then adapt that preparation to work they do abroad. None of these represents an answer for every student. Each of these four replies could be applied to one’s preparation for any type of medical work - but they aren’t. In fact, it is possible to give some rather concrete general advice, bearing in mind that local realities and circumstances will affect the implementation of that advice. Some of those realities are the following:

The population structure in the target community often resembles a “broad-based pyramid” with lots of children and women in their childbearing years, and relatively fewer older people. This has implications for students who plan to work in such a setting: the care of women and of children (including obstetric and neonatal problems) is likely to represent a significant portion of a community’s need. (The study of population structure and its relation to health is known as demography.)

Traditionally defined Western clinical specialties in the United States—OB-GYN for women, pediatrics for children—do not reflect this reality, for each focuses on one of these groups and excludes the other. (By contrast, public health specialties, such as maternal-child health, nutrition, tropical medicine and health education, are more reflective of actual circumstances a student is likely to encounter.)

Acute health needs also become quickly evident in any new setting. News may arrive of a woman hemorrhaging following delivery, or of a person with severe abdominal pain. The concept of specialties—that one, by choice, takes care only of children, or only of eye problems—can be difficult to explain in such circumstances.

Locally available technology may not be that to which the student is accustomed. Presented with a child who has fever, tachypnea, and cough, the student may learn that to x-ray that child is not feasible. In fact, an x-ray may not be necessary, if the student can learn appropriate algorithms for diagnosis that do not depend on technology. A case in point is that the triad just discussed means pneumonia. We challenge the reader to present a case in which it did not.

While one might ignore such local realities, a community quickly learns whether a health care provider or student is responsive to locally perceived needs. The newcomer will also be tested, in ways which may be subtle or overt, to find out whether s/he does possess skills, knowledge or abilities that the community perceives as valuable. The student may not necessarily recognize this process and may notice only that, after the first few days, community interest in the student and project has waned.

Some physicians are comfortable visiting a community for a brief period, using their time very efficiently to remove a large number of cataracts, then returning to the United States. Others cannot accept the idea that, at the same time, other patients were ill or dying from other conditions that could easily have been treated or prevented but (due to the physician's specialty choice) were not.

While there is no "right" or "moral" answer to such dilemmas, there may certainly be answers that are more or less acceptable in a given community. This provides one of several strong arguments for knowing the community in which one ultimately hopes to serve.

One justification which has been advanced in favor of visiting another country as a subspecialist, rather than a generalist, is that no matter how broadly one trains, one will never be adequately prepared to handle everything that one encounters; therefore it is preferable to do one procedure (such as cataract removals, surveys, or Pap smears) at high volume or to concentrate on a single problem (such as measles immunization.) This argument assumes, however, that one may decide in advance what services are to be provided, without necessarily considering the expectations and perceived needs within the community to be served, as though "they should be grateful for anything we decide to do for them." This is referred to as the "colonial" model of medicine and has probably become less tenable over time. Within the United States, physicians still do have the luxury of choosing the specialty and setting in which they want to practice; the concept of developing one's practice in response to locally identified needs is an unfamiliar one. One powerful lesson which students may learn abroad (more often than domestically) is that of tailoring health care specifically to the unmet needs of a community. Predetermining what one will do tends to obviate this.

SPECIALTY CHOICE AS A POLITICAL STATEMENT

It might be argued that any act one commits in a foreign country is a political one, and nowhere is this more true than in medicine. A medical degree implies power, education, social status, a certain investment in the existing system, and in many countries is a stepping stone to political rank. United States medical students, who may consider themselves apolitical or idealistic ("I only want to help people") may be startled to find meanings attributed to their words and actions that they had not intended.

The simple choice of a specialty may have implications the student had not recognized. In some parts of Latin America, for example, just to identify oneself with family practice may be interpreted as a political statement! There are several reasons for this. In some settings, family practice has placed an emphasis on rural, impoverished populations, or on care of the poor in major urban centers—that may be at odds with priorities of the government or regarded as "empowerment of the masses." The fact that family practice has received endorsement in Cuba as an ideal form of health care delivery has also been noted in neighboring nations. Similar considerations pertain to other specialties, particularly if a government minister has endorsed a particular specialty or perspective.

As previously mentioned, one cannot necessarily make plans within a vacuum and then expect them to be endorsed when one arrives to work in another country. Locally perceived needs and resources, and also the politics of the particular individual(s) or specialty with whom a student plans to associate, may influence what s/he is actually able to do.

A student may arrive, for example, to discover that the supervisor with whom s/he plans to work, is clearly at odds with influential members of the community. That student may therefore walk into a very complex and difficult situation without so anticipating.

FAMILY PRACTICE TRAINING AND INTERNATIONAL HEALTH

Although this manual is not intended to promote any one philosophy of international health, several considerations, apart from demographic ones, argue strongly in favor of family practice as an excellent and broadly based background for international work. The family practice concept of “defining one’s zone of competence,” which is individually determined by one’s training, experience, setting and interests, and which may be expanded or contracted as necessary, is a useful one when applied to international work. The emphasis on behavioral medicine in family practice training is also helpful—particularly the increasing emphasis on social sciences, such as anthropology, which offer excellent tools for looking at behaviors and interactions in cross-cultural settings and for systematically interpreting what one observes.

OTHER SUGGESTED ELECTIVES FOR STUDENTS PLANNING INTERNATIONAL WORK

At the beginning of their third or fourth year, medical students often ask what electives might best prepare them for international work in the future. In light of previous suggestions, an excellent grounding in physical diagnosis is probably the fundamental goal for a third- or fourth-year student. Experiences which promote this—which provide extensive, well supervised, opportunities for *histories and physicals*, in all body systems and in patients of all ages and sexes—or which allow students to learn *the fundamental procedures of clinical medicine*, such as lumbar puncture, venipuncture, or surgical closure—are probably the best preparation for any medical student, whether planning an international experience or not. Although popular and useful, such courses as laboratory medicine, radiology, pathology, or alternatively such courses as epidemiology or health administration *usually do not add to a student’s physical diagnosis skills*, nor are they necessarily applicable in settings of limited technology. And while there will be plenty of opportunity to take such courses later, deficient skills in physical diagnosis can prove troubling, limiting, and difficult to rectify later in one’s career.

There are in fact a number of clinical electives that may prove extremely useful in international work. Some of these are rarely encountered in residency, meaning that if a student does not take them in medical school, they may not be readily available again.

ANESTHESIOLOGY may be a very useful elective for a student who plans to work abroad. In many settings, an anesthetist is not available, and if one does not have the capacity to control pain, it may be impossible to do anything else. A compound fracture can be managed if pain control can be achieved; in the absence of pain control, it may be virtually impossible. How many of you reading this paragraph could adequately block an arm to allow management of such a fracture? In addition, anesthesiology may be an excellent rotation on which to learn fundamental procedures, such as venipuncture, lumbar puncture, and cutdown, which an intern is expected to know.

SURGERY Surgical conditions will undoubtedly be encountered in any setting. A familiarity with the basics of surgery, including cleansing, opening, closing, wound care, and postoperative management, may render a student invaluable. A medical student may discover that s/he has had more surgical training (however little that is) than anyone else in the community!

ORTHOPEDICS AND RHEUMATOLOGY Trauma and musculoskeletal pain are encountered everywhere. If x-ray facilities are not available, one’s diagnostic and management skills in orthopedics, and in rheumatology become crucial.

DERMATOLOGY In the author's experience, dermatologic complaints may be the single largest category one sees; and often the healer's credibility is on the line, for the patient can readily see whether the condition is improving or not. Unfortunately, many tropical conditions are not seen often in United States training, so a lot depends on learning the basic skills of describing and investigating an unknown condition and on learning the treatments locally available.

INFECTIOUS DISEASE Conditions that are common in the United States may be fatal abroad; some which are uncommon in the States are likewise ominous abroad. In other words, an infectious disease elective may be excellent preparation for international experience; and international experience, in turn, is an excellent complement to infectious disease training.

OPHTHALMOLOGY Eye complaints are ubiquitous—whether due to refractive errors, allergy, bright sun, environmental irritants, cataracts, glaucoma, or retinal or vascular disease. A great deal may be diagnosed if one is proficient at ophthalmologic examination. Some students, unfortunately, are not.

DENTISTRY It seems ironic that medical students learn to examine and manage illness in every body system except the teeth. Many dental faculty are more than willing to teach medical students the basics of dental diagnosis, management and preventive care. Unfortunately, many students never ask.

It should be emphasized that the electives described above are certainly not the only ones that might be recommended to a student who plans to go abroad. They are, simply, some of those which medical students and returning clinicians have described as having been particularly useful.

SHOULD ONE FIRST OBTAIN AN MPH DEGREE?

There is little question that a master's of public health degree (at least from certain schools) is a respected credential in many parts of the world. Carl Taylor, MD,² points out, moreover, that there are abundant opportunities to become involved in public health or community-based programs, since training in these areas is not yet well developed in many countries. Moreover, public health specialties, such as maternal-child health, nutrition, tropical medicine and health education, are more reflective of actual circumstances a student is likely to encounter, than conventionally defined clinical specialties such as pediatrics, nephrology or radiology; how many patients are likely to have illnesses appropriate to just one of these specialties?

However, a beginner may have little idea what courses to take or what lessons to extract from Public Health training. A School of Public Health presents a student with a bewildering array of new courses in unfamiliar disciplines: epidemiology, statistics, environmental health, operations research, tropical medicine, health economics, population studies. A student beginning such a program may be overwhelmed by the variety of unfamiliar subjects, and may decide to take one course in each area. The result is something like reading the first page of each chapter in a book: one gains superficial impressions, without in-depth understanding.

By contrast, a student who has already had some international experience has greater basis for selecting from the courses that a school of public health offers. In one setting, it may be useful to know a great deal about cleaning up water supplies. In another, control of schistosomiasis may be paramount. In a third, an oral rehydration program may save many lives. MPH training offers the opportunity to learn such skills in a structured fashion.

²Carl Taylor, MD, is professor emeritus, Department of International Health, Johns Hopkins University.

WHAT ABOUT A PREVENTIVE MEDICINE RESIDENCY?

Preventive medicine may appear particularly attractive because an MPH degree is included within preventive medicine residency training, and because international health is one accepted focus of such training. Like other forms of advanced training, a preventive medicine residency serves at least two primary functions:

- 1) It allows one to network with other people and to gain experience and expertise in a particular area, and,
- 2) It allows one to continue a project, perhaps started during MPH training, which could not otherwise be completed.

However, like the MPH itself, this credential might best be left until a student knows in exactly what special areas s/he wishes to focus. At that point, nothing else offers quite the same opportunity for advanced study in a targeted domain.

THE UNIVERSITY OF ARIZONA SUMMER COURSE

The University of Arizona offers a summer course in international health the last three weeks of July each year. No tuition is charged, and student housing is often available for participants. Students and faculty come from all over the country to participate in this course. The course focuses strongly on practical and clinical skills and is intended for students who have already arranged to work in a specific international site. Table 1 on page 20 reflects its curriculum.

LEARNING “IN THE FIELD”

Despite this discussion, the question of additional training should be viewed with some caution. Medical people in particular are susceptible to the idea that they must take a course or get a certificate in order to do almost anything. By contrast, in international health (in particular) it may be very difficult to train in anticipation of what one is going to need. For example, some clinicians point out that, no matter how well you learn dermatology, the first rash you encounter in a foreign country is going to be one you never studied, because it comes from an exposure to something totally unfamiliar to you (such as ox dung.)

At some point, students must realize that *they cannot adequately train for everything they may see*. Learning in the field is going to be necessary in any case, and is probably preferable to a degree program in many ways. More important than a degree, initially, may be a habit of careful observation, thoughtful questioning, and willingness to investigate and confirm one's impressions. Learning in the field does not mean an absence of study, of structure, or even of course work. It means learning where one is, not depending on a distant classroom or blindly training in anticipation.

Students may not appreciate that *they already have something to offer* even without advanced training, simply because of the background, experiences, and understandings they have already acquired through their upbringing in a different country. The concepts of education, first aid, and basic hygiene with which they grew up, for example, may be sufficiently different to provide valuable new options for their hosts.

IS IT REASONABLE TO PLAN A BRIEF ELECTIVE?

Any visit by a medical student is likely to require an expenditure of resources and time by the hosts which will not necessarily be repaid during a short elective. Some experienced faculty therefore question the appropriateness of a single, brief student rotation abroad that is conceived as an isolated event.

On the other hand, a brief visit may prove very profitable for all concerned if it is planned as one of several visits to the same setting over time. Some faculty recommend that a student plan a short, initial exposure to a site in order to get a sense of the environment, the resources and the people with whom s/he might wish to work.

That first visit might be a vacation, or a period of time spent simply living in the community and quietly observing, with no attempt to intervene. Medical students, working in the same community as anthropology students, have been known to express bewilderment at the latter's wish to observe the community quietly and inconspicuously all day, for medical students typically want to "do something" rather than sit and observe. Yet the latter may represent an excellent use of time in one's first exploratory visit to a foreign community!

That initial, introductory visit makes possible more focused training in preparation for the student's return, and, if the student returns again and again, each period of field learning may be reinforced by a period of study at home. Advanced study, such as a master's of public health degree program, may be most productive when one has knowledge of a specific setting and has had personal experience in that setting. Such an approach potentially minimizes the shortcomings, and maximizes the potential, of both "learning in the field" and of classroom learning.

The checklists that form the next section of this manual are intended for use as a student's plans for international study are developed. Although the wide range of items on these checklists may seem intimidating at first, each is much more easily dealt with if recognized early; each will almost certainly arise on-site if not dealt with in advance!

In many ways, the preparation for international study is like the preparation for any aspect of a medical career. At the beginning, one has a dream: to become a healer and to play a role one has not played before. Then come the very pragmatic realities of medical school and residency, during which every detail of one's function as a physician is examined, learned, and challenged. But after that sometimes harsh process, the original dream now becomes real. The same happens in international health. In the beginning, one may wish only to go to an area of great need and to serve. Then minutiae and realities intrude, in some cases greater than those which domestic practice requires. In the end, however, one may truly serve, and not just dream.

FIRST CHECKLIST: EARLY CONSIDERATIONS FOR A STUDENT CONSIDERING AN INTERNATIONAL ELECTIVE

TIME FRAME

- WHEN SHOULD PLANNING START?
- WHEN IN MEDICAL SCHOOL IS BEST?
- WHEN IS MATCH DAY?
- ALLOW TIME TO ASSIMILATE THE EXPERIENCE IS PREGNANCY A POSSIBILITY?
- CONSIDER A SUMMER ELECTIVE

OTHER CONSIDERATIONS

- FUNDING
- ADDITIONAL FUNDS MAY ALSO BE REQUIRED ON SHORT NOTICE
- HEALTH AND ALLERGY ISSUES

- IS A “SIGNIFICANT OTHER” INVOLVED?
- PRELIMINARY IDENTIFICATION OF SITES, ADVISORS, AND FUNDS
- WHAT LISTINGS ARE AVAILABLE?
- INTERNATIONAL ORGANIZATIONS AND CONFERENCES
- US-BASED OPTIONS
- FINDING AN ADVISOR: ONE IS NOT ENOUGH
- HOW DOES THE STUDENT LEARN MOST EFFECTIVELY?
- WHAT LANGUAGES DOES THE STUDENT SPEAK?
- HOW DOES THE STUDENT “ORIENT” TO NEW SURROUNDINGS?

FIRST CHECKLIST: EARLY CONSIDERATIONS FOR A STUDENT CONSIDERING AN INTERNATIONAL ELECTIVE

WHEN SHOULD PLANNING START?

In arranging an international rotation, students often do not realize that the timeline for such an experience is different from that for a more conventional elective. Often the idea of working in an international setting has been at the back of a student’s mind for some time. Then, toward the end of the third year, the student realizes that time is running out. It may be spring and the only reasonable time is the coming summer, just a couple of months away.

What students may do then is quickly talk with friends or former students or residents who did a rotation overseas to find a site that will take them on short notice. Sometimes the letter which another student had obtained from the supervisor abroad is so vague that it can be used again. Such situations can often be detected because the student now proposing such a rotation is extremely vague about details yet expresses great urgency.

While such a timeline may work, however badly, for planning one’s domestic rotations, it almost never works for an international one. A more appropriate timeline for planning an international rotation begins months, or preferably years, ahead of the proposed travel date.

SHORT VERSUS LONG ELECTIVES

An elective of *any* length requires an expenditure of resources and time by the hosts, to welcome and support the student. This expenditure cannot necessarily be reciprocated in a short elective. An optimal “return” is offered if the student develops a substantial and effective relationship with the community over a longer period of time. This does not necessarily argue for a lengthy elective. A short one is most reasonable, however, if the intent is to follow it with other visits.

CAUTIONS WHEN PLANNING AN ELECTIVE LATE IN FOURTH YEAR

One might think that an international elective is best put off until the end of medical school, where it causes least disruption to the rest of the curriculum. However, several considerations argue *against* planning an international experience just before the end of fourth year.

DON’T FORGET ABOUT “MATCH DAY”!

The day on which ‘match results’ are released, and unmatched students must be paired with residency programs that did not fill, is *not* a good time to be out of the country. Yet each year unmatched students are away and impossible to reach at that crucial time. Ironically, even students who are careful not to miss crucial exams, such as Boards and finals, do not think about match day, although it may impact one’s future more than any exam.

ALLOW TIME TO ASSIMILATE THE EXPERIENCE

A later section will discuss one's return from another cultural setting, and some of the challenges this poses. The first day of internship is not the best time to experience that process! Ideally, the international elective will come early enough that other rotations will then allow time for the student to digest, discuss, and assimilate the experience.

IS PREGNANCY A POSSIBILITY?

If pregnancy, of student or spouse, is possible, then a student is wise not to plan to be abroad nine months after the date that s/he finalizes a course schedule. Otherwise, by the time pregnancy is confirmed, it may be too late to change plans, and the period around the birth of a baby is usually *not* an optimal time to be leaving for an experience abroad! It is surprising that so many people don't think of this precaution that the author, among others, has learned through personal experience.

CONSIDER A SUMMER ELECTIVE

There are several factors which may make the summer before or after the fourth year an ideal time for an international elective. In summer, medical schools are typically under strain. Faculty want to take vacations; so do interns and residents. Yet at the same time that faculty resources may be least, the teaching load is the greatest. New interns and residents start in July; this means that hospitals and clinics are suddenly filled with people who are new at what they are doing and depend heavily on faculty for guidance and support. Medical schools are also gearing up in summer for an influx of new students. At many schools, physical diagnosis, which depends on large numbers of faculty, is also taught at this time. On clinical rotations, new interns and residents are eager to get their feet wet and start getting experience of their own, delivering babies, scrubbing in surgery and evaluating medical and pediatric patients. The medical student is likely to take second or third place to them at deliveries and at surgery, and may find that new interns aren't the best teachers on non-procedural services. In short, this may be an excellent time for a student to be away.

There can be other advantages to going abroad in summer. Particularly in the case of tropical destinations, a student may "avoid the rush" of other travelers by going then. Children and significant others may be best able to come along then. The costs of travel may decrease, depending on where one is going, and there may be less competition in summer for funds.

Although summer may offer advantages as a time for an international elective, the summer before *third* year is not recommended. The beginning of third year is a crucial time in which a student begins to learn the skills, procedures and approaches that will be used throughout a clinical career; clinical services expect to teach the "basics" to third year students then. A student who falls behind at this crucial time, due to an elective abroad, may find it difficult to catch up, and be perceived as less than serious about medicine into the bargain.

EARLY CONSIDERATIONS

FUNDING

A student may think that if an elective is planned early enough, funding of some sort is bound to materialize. In many cases this does happen, if two pieces of advice are borne in mind. First, efforts to secure funding should begin *early*. Assume that it may take a year longer than there is any reason to expect. And second, instead of designing an experience, and then seeking funds, it may be wiser to first identify those funds that will be available, and then tailor the plans to available funds.

A student may not see the point of this. When one already has thousands of dollars' worth of loans, financial questions have an air of unreality. Alternatively, if one is well enough off financially not to have loans during medical school, the cost of an international elective may not be an issue. A student who wishes to work abroad out of idealism may not be preoccupied with cost either. For such reasons, it may fall to the advisor to assure that early attention is paid to the crucial question of funding.

WILL FUNDS IN ADDITION TO THOSE THAT ARE BUDGETED BE AVAILABLE ON SHORT NOTICE?

An advisor may be particularly helpful by pointing out that the most crucial funding issue may be, not the cost of the experience itself, but the *availability of additional funds on short notice* should plans change. A student may suddenly need to fly home, to change lodging, or to buy new clothes. An accident, illness or dental problem may occur. Something may get broken that must be replaced. Gifts or gratuities may be expected that the student had not foreseen. At such times, the ability to quickly access additional funds, not just to pay for what one had already arranged, becomes paramount.

HEALTH AND ALLERGY ISSUES

There are certain circumstances a student may not be physically able to tolerate. Unless these circumstances are identified early, time and effort may be invested in planning for an experience that the student cannot realistically undertake. A student violently allergic to bee stings, for example, may not belong in certain places. A student who habitually forgets to take medicines may be at particular risk for malaria in an endemic region. A student who simply must bathe every day to be comfortable probably will not enjoy a hot, humid setting that lacks means for doing so. A mountainside location, with requisite climbing, may be hard on a student who is not in very good physical condition. An individual with open skin lesions is wise to avoid tropical heat and humidity; those prone to sunburn may be wise to avoid high altitudes or desert.

IS A SIGNIFICANT OTHER INVOLVED IN THE PROJECT?

In some cases, a student's plans to go abroad may revolve around a wish to accompany another person, rather than around any personal or educational goal of the student per se. The advisor may wish to meet with *both people* involved, not just the advisee, in this case. The motivations, goals, constraints, and logistic arrangements that govern an experience under these circumstances may not be those of the advisee and they may have little to do with the content of the elective or with medical training. If the primary reason for the experience appears to be something other than medical education, this is best identified early. It may be most appropriate to plan such an experience as a vacation, rather than a clinical elective.

At the same time, most of the topics in this manual, such as impacts on the host community, health considerations, and adjustment to a new environment, still apply, and an advisor's help may be needed *more* than in a conventional elective.

PRELIMINARY IDENTIFICATION OF SITES, LOCAL ADVISORS AND FUNDS

Information on such topics is still largely obtained largely through a hit-or-miss process, although several organizations are now making plans to computerize, or at least to centralize, these functions. At present, there are three primary ways that one learns about resources: through word of mouth; through written reports of other students who have taken international electives; and through published lists. Such lists should be viewed with caution. They quickly become outdated, sometimes even before they are published; in addition, as will be discussed in the next section, the choice of a site may *not* be the best place to start in planning an international elective.

The subcommittee that produced this manual is now working to develop a central, computerized clearinghouse to match students and faculty with sources of information. Computerization will presumably allow such information to be kept current. That clearinghouse, unfortunately, is not yet a reality. Those of you interested in working on it are urged to contact the author!

FINDING AN ADVISOR: ONE MAY NOT BE ENOUGH!

In some cases, fearful that their dream of study overseas will be shot down, students hesitate to seek out an advisor. However, this is one process that is a great deal easier when it is done with someone else who is interested, informed, and constructive. In addition, seeking an advisor early allows time to obtain second opinions or additional advice.

Just to identify a faculty member willing to advise in international health is difficult enough; the process becomes more complex when one realizes that not all advisors are comparable. Students have many and varied reasons for their interest in international study. It should come as no surprise that faculty likewise have many reasons for working internationally themselves and for wanting to teach or to advise in this field. For example, just as parents may “live vicariously” through a child, faculty may be tempted to experience the world through the eyes of their students. It is also tempting to bask in one’s reputation as a seasoned internationalist, admired by students and sharing wisdom, stories and insight. Under such circumstances, “heroes and legends” may develop that do not have much to do with reality.

Students cannot necessarily evaluate the advice of someone whose experience was long ago or far away; independent sources of confirmation are often not at hand. Faculty reading this manual can help to minimize this pitfall for their students by recognizing such tendencies in themselves. Students, in turn, are probably wisest to seek, and thoughtfully evaluate, advice from several sources.

OTHER EARLY CONSIDERATIONS

It may be tempting for a student to put off many difficult questions in planning an international elective, hoping that they will answer themselves or that a made-to-order elective will come along and make it unnecessary to work out all details. However, through addressing key issues, the student and advisor may target an experience much more closely to a student’s needs than would occur if essential elements were left to fate.

HOW DOES THE STUDENT LEARN MOST EFFECTIVELY?

Classically, there are three basic approaches to medical education. The first, “learning by doing,” is traditionally attributed to county hospitals and involves a lot of hands-on experience. By contrast, training in a private hospital is likely to involve teaching and supervision by expert physicians who may share a lifetime of wisdom and experience, but who may not allow students as much direct involvement with their private patients. The third, or “university” approach, might be characterized as involving a good deal of study and intellectual exercise. Cases referred to a university hospital are likely to have stumped other clinicians and may require specialized problem-solving, clinical or technologic skills.

These three approaches to teaching are distinct even in the United States. In other countries, the differences may be manifold greater. “Learning by doing” may be that in the extreme, with no other medical personnel for three hundred miles and huge numbers of patients. University differential diagnoses may include lists of diseases the student has never heard of and will not see back home. And “private” patients may be truly privileged in societies that make no secret of class differences or the distinctions of rank.

Clinical teachers themselves use a variety of styles that may vary from person to person. Some are authoritarian, telling the student what to do and expecting obedience. Others teach by encouraging and guiding a student who in turn sorts the problem out. Some teach by example. Some expect a “good” student to correctly guess what they are thinking without being told. Some are strong leaders; some lead in subtle ways; some, unfortunately, have rather unrealistic ideas as to what may be expected of a student.

All of this happens even in the relatively standardized setting of US medical schools. In a foreign setting, many of the checks and balances that provide guidance to faculty here may be absent, and culturally-determined issues such as gender relationships may also come into play. And the factors which motivate physicians to work in foreign settings are at least as diverse as those of students and may not be compatible with those of every student.

A student cannot control these elements; but a student can do a great deal by identifying his or her preferred learning style(s) and seeking an experience and supervisor compatible with them. In many cases, students have not given much thought to how they learn or what they prefer. They have become so used to simply “taking what comes,” be it instructor, patient, or teaching style, that they don’t think to actively seek out an experience which might optimize their own ways of learning. An advisor can help a student to do so, and such insights may be beneficial in planning domestic rotations, and in choosing a residency, as well.

WHAT LANGUAGES DOES THE STUDENT SPEAK?

The following seems so obvious as to be hardly worth mentioning; but it may be the most disregarded advice in this manual. Contrary to what many students think, English will *not* suffice everywhere! Many nuances of meaning are lost through translation or interpretation. A language the student studied in junior high will not necessarily come back with use, nor can a language usually be learned in the two weeks before one leaves for an elective - at least not well enough for one to follow the innuendoes of health and illness-related conversation.

It is wiser to take accurate stock of what languages one actually knows, and then to select a site for which one’s language capabilities are appropriate. Otherwise, the bulk of the experience—the process of communicating, exchanging information, understanding local perceptions, and living within a new culture—is not likely to be very profound.

HOW DOES THE STUDENT “ORIENT” TO NEW SURROUNDINGS?

Different students seem to orient to differing elements when placed in an unfamiliar environment. This has become clear as several different students and residents from the University of Minnesota have recently gone to the same field training project in Madagascar. Although they lived (sequentially) in the same cottage, worked in the same hospital with the same people, and had roughly the same experience, each person’s way of describing the experience and the setting varied markedly.

One individual was not comfortable until he had located and “mapped” everything - the hospital complex, cottages, village, markets and in fact the entire surrounding area and the forests, shoreline and roads. This person oriented geographically and, in describing the geography, felt he had described the experience. Another student first located the bathrooms, the closets, the closest sources of food and water, warm water for bathing, the most practical place to wash clothes, and so on. To her, meeting the basic needs of daily life was the first task. A student who followed was most impressed with the physical discomfort of the setting - the heat, the humidity, the gritty red dust that got into everything including food, the taste of the water, the slipperiness of the path after a rain, the odors. To this student, it was first necessary to find means of coping with such physical discomforts in order to begin work. By exploring with a student, the elements most essential to that student in “orienting” to a new setting, the advisor may help to identify and examine elements of a proposed experience that might otherwise not have been considered.

WHAT HAS THE STUDENT ALREADY DONE?

Already at this point, several questions may be asked that will suggest how the student will respond to an experience overseas. What does the student know of international electives that others have taken? Does the student know what s/he is getting into? Has the student had previous experiences with isolation, intense heat, insects, bad odors, limited water, life in an unfamiliar cultural setting? What has the student already done to prepare for a possible international experience in the future? Such questions are better asked now, than just before the student plans to leave.

SECOND CHECKLIST: ARRANGING A SPECIFIC EXPERIENCE

- HAVE AN 'ON-SITE' SUPERVISOR AND HOST BEEN IDENTIFIED?
- HAS HUMAN SUBJECTS COMMITTEE APPROVAL BEEN OBTAINED?

HAS A PROJECT OR QUESTION BEEN IDENTIFIED? CONSIDER EACH OF THE FOLLOWING POSSIBLE AREAS OF FOCUS:

- A POPULATION
- DISEASES AND THEIR PRESENTATION LOCALLY
- APPROPRIATE TECHNOLOGIES
- ENVIRONMENTAL IMPACTS UPON HEALTH
- POLITICAL AND ECONOMIC ISSUES
- COMMUNITY HEALTH NEEDS
- LOGISTICS OF HEALTH CARE DELIVERY
- PHYSICAL DIAGNOSIS SKILLS
- CROSS-CULTURAL CARE

WHAT ARE THE STUDENT'S MOTIVATIONS FOR INTERNATIONAL STUDY?:

- DESIRE FOR A BROADER PERSPECTIVE ON MEDICINE
- A SENSE THAT 'SOMETHING IS MISSING' FROM CURRICULUM
- A WISH TO IMPROVE CLINICAL DIAGNOSTIC SKILLS
- RELIGIOUS CONVICTION OR "SENSE OF MISSION"
- DESIRE FOR ADVENTURE
- ESCAPISM
- AVAILABILITY OF A 'CONTACT PERSON'
- AVAILABILITY OF A READY-MADE SITE
- POLITICAL CONVICTION OR PHILOSOPHY OF HEALTH CARE
- INTERNATIONAL PLANS OF A 'SIGNIFICANT OTHER'
- DESIRE FOR A VACATION

SECOND CHECKLIST: ARRANGING A SPECIFIC EXPERIENCE

OVERVIEW

The most difficult situation arises when a student tries to be “open to anything.” Often a student will think it is helpful to be very flexible: ‘I’m willing to go anywhere and learn anything.’ Actually, this makes things much harder. To begin with, it probably isn’t true, and simply reflects a lack of introspection or self-knowledge on the part of the student. Second, it may reflect motivations for an international rotation that are not necessarily appropriate (please see the section on “motivations.”) Third, it puts most of the burden of developing a rotation upon the advisor, the local host, or other people, since by implication the student has abdicated most decisions. And fourth, it is almost impossible to prepare given such broad guidelines.

International Health is sometimes presented to students as though, if one is among those few gifted individuals who are true internationalists, one can function successfully in a wide range of countries or projects. This is an appealing image for students, some of whom likewise wish to be versatile experts on a world stage and therefore try to be “open to anything” in international health. It also contains some truth, for certainly there are skills, attitudes and knowledge in international health which may be applicable in a variety of settings.

Such an image, however, should be viewed with caution. In some cases it may reflect, not universal expertise, but obliviousness to feedback, or extraordinary ego, or a missionary conviction that one is “right” whatever others may think. What physician is invariably successful with every patient? In public health, in particular, the consequences of policies and actions may not be fully evident for decades, and provide little feedback on the merits of one’s work, so that one may become undeservedly complacent.

In most cases, it is most feasible, especially for a student just setting out, to try to become familiar with one setting, one need, and one area of expertise, rather than to set out to master world health from the beginning.

PRIORITIZE THE DECISIONS TO BE MADE

There are six elements which must be decided on:

- medical specialty area
- setting
- time period
- project (rotation)
- population
- supervising faculty person

In United States clinical rotations, typically the elements are chosen by a student in the order just listed: one chooses a specialty to study, a hospital, a specific service and a time period; exactly what cases are seen and whom the student works with are left to chance, since they depend on what patients come in and who is staffing the hospital during that particular time period.

In planning an international elective, students tend to try to approach it the same way, trying to select a specialty and setting first (“I’d like to study pediatrics in Guatemala”) and then working down the list.

We suggest that it may be most effective, in planning an international experience, to *prioritize these elements in the reverse order.*

There is so much to be accomplished, in a short time and an unfamiliar setting, that a student can hardly hope to do it alone. A crucial role is therefore played by the person, or persons, in the host country with whom the student works, who serve as the supervisor and host for that student.

The supervisor serves as a surrogate, or counterpart, faculty member in the setting the student visits. This individual is responsible for the teaching and evaluation of the student and for assuring that agreed-upon objectives are met.

The host, who may or may not be the same individual as the supervisor, introduces the student to unfamiliar settings and cultural norms—interpreting customs and expectations and vouching for the student where endorsement is needed.

S/he can help the student understand what is possible and reasonable under local circumstances and to understand why something the student wants to do has not already been done or cannot be done. The host can facilitate the acquisition of language skills and interpersonal connections crucial to the project. And s/he can smooth the juxtaposition of a student and project into a setting, smoothing the transition at each end, and carrying on the student's work if this is merited, since it is difficult otherwise for a student to accomplish something lasting in a short time.

Once a supervisor and host are chosen, the types of projects that may be pursued, the choice of setting, the time period, and the country often fall into place. As an added benefit, the prospective supervisor may suggest particular readings or training experiences that the student can pursue ahead of time, and suggest supplies which the student might bring along on the rotation.

DEVELOP A PLAN FOR A SPECIFIC PROJECT

Along with identification of the people with whom one will work, the identification of what the student hopes to accomplish—the project, or the question, which led the student to seek international experience in the first place—should be decided early. To a degree, the identification of people and of a project are interdependent; the choice of each sets limits on the other. The project and person then determine other elements; certain projects, for example, can't be done in some settings. Since the student's project in many cases forms the "focus" of an elective, the following pages will discuss several considerations related to the development of such projects.

Dr. Arthur Kleinman, chair of Medical Anthropology at Harvard University and a former member of the family medicine faculty at the University of Washington, suggests that a new endeavor is ideally approached with a "question": in this case, something the student wants to know which led to the desire to study internationally in the first place. Identifying this question helps to focus a student's observation; to minimize the time the student spends on unrelated activities; and to guide in preparing for the experience.

Contrary to what one might think, a focus on a specific question does not restrict one's experience. Students may be resistant to the idea of defining what they want to do—"I want to experience everything and learn as much as possible." Unfortunately, on their return, such a student may find it impossible to convey all of the wonderful things that have been learned: "I just can't describe the experience—it was all so different—you'd have to go there to understand." Because there was no mental filing system, little was retained and still less is retrievable.

By contrast, a student who goes with a focused question returns with information related to that question, and, in addition, has a frame of reference to which other observations and facts may be related. One is not blinded by being a focused observer, this, however, is a concept which seems to be difficult for many students to grasp.

The most common mistake students make is to try to answer a question that is too 'big.' The type of student who is motivated to expand his or her horizons and to work internationally, frequently wants to explore significant issues that will "make a difference." Many questions, however, ("How has health care changed under Castro?") would be difficult to answer even in a much longer period of study. Other questions, by contrast, could be answered without going abroad at all — either through reading, or because the answers can be found closer to home. In such a case, the student needs to reexamine whether the reason which has been given, is the true reason s/he wants to go.

"Smaller" questions, of a type that could be answered with small amounts of information or in relatively short periods of time, may be of several types. *Exceptions to a rule* may be of great interest — cases in which, for example, an illness did not run its usual course (why?) Careful *documentation of case histories* may be particularly valuable in cases of unusual or unfamiliar illnesses; even single case histories are occasionally publishable in major journals. *Baseline measures in defined populations* may allow local providers to better target, and measure the impacts of, interventions. Student and advisor may identify, together, other types of questions which lend themselves to short-term projects in the student's intended setting.

HUMAN SUBJECTS COMMITTEE APPROVAL

In developing a project, one may not realize that approval from one's local committee on the use of human subjects in research may be required for any study, survey or other project abroad. This protects the people being studied; it also protects the student against any question of invasion of privacy, human experimentation or other inappropriate activity. Hospitals and Universities usually have a form to fill out and doing so makes one think carefully about what one is planning to do to fellow human beings in a distant setting.

CONSIDER EACH OF THE FOLLOWING POSSIBLE AREAS OF FOCUS:

A POPULATION

Questions concerning a particular population, its demographic structure, distribution, characteristics, cultural makeup, perceptions or beliefs, obviously lend themselves to study during an international rotation. Medical students and residents may need to seek out additional background information in order to undertake such studies. A student planning to look into population questions might well be encouraged to make contact with a health statistician, demographer, anthropologist, or medical geographer ahead of time (or to read on these subjects) to learn appropriate skills and methodologies.

DISEASES AND THEIR PRESENTATION

A wide range of diseases which would not be encountered in the United States (as well as familiar diseases presenting in unfamiliar circumstances) may be studied on an international elective. Medical students are often well trained to study diseases and to obtain careful case histories. On the other hand, it is reasonable for the advisor to ask: what does the student plan to do with this new knowledge? How might it be translated into new clinical knowledge, incorporated into the curriculum, or published? The world is full of settings in which students have visited, observed, and gone away again, with nobody the wiser; yet unquestionably what those students learned could be of immense benefit if it could be captured or made known to others. The advisor can help decide, in advance, how this might be done.

LOCALLY APPROPRIATE TECHNOLOGIES

Along with learning about new diseases, students cite “learning new approaches to care” as a major reason for international experience. The advisor should ascertain, however, that the student will be truly able to identify appropriate local technologies and approaches which may be applicable to the United States and elsewhere. Otherwise, students are at risk for learning “bad habits” (short cuts, use of prophylactic antibiotics in everyone, or the practice of medicine in the absence of a history or physical) in the name of international health when in fact such adaptations to a lack of resources and regulations are not necessarily the most exportable lessons to be learned from other countries. For such reasons the advisor should explore exactly what the student has in mind.

Some students believe that the use of any form of high technology is inappropriate in settings of poverty and that only the simplest or least costly methodologies should ever be used. In fact, higher technologies may be tremendously cost-beneficial in some cases and their application may represent a significant contribution which a United States student may offer a developing community. The blanket rejection of such possibilities may be a signal that one is dealing with an inexperienced or very dogmatic student.

ENVIRONMENTAL IMPACTS UPON HEALTH

“Threats” to health from the biologic, physical and social environment typically fall within the domains of public health. When clearly defined, these may represent an excellent focus for student projects.

The biologic environment includes bacteria, viruses, parasites, fungi, arthropods, predators, pets, other animals living within the community, as well as foods, garbage, sewage and other organic substances. Each of these may impact upon health in a community in ways which medical students are already well trained to study.

The physical environment includes temperature, humidity, altitude, climate, inorganic wastes and pollutants, drought, floods, barbed wire and broken glass, radiation, sun, snow, water and its contaminants, salt and fire. The influences of such factors may be much clearer in the developing world than in urban United States settings; hence they may represent an interesting focus of study for a student, though one which students often have little experience in measuring.

The social environment includes alcohol and drugs, war, violence, poverty, accidents, employment, access to health care, stress, recreation and lifestyle. The nature and impacts of these factors vary from one community to another; they may be of great interest but fairly difficult for a student to quantify without preliminary readings and/or discussion with a knowledgeable colleague.

POLITICAL AND ECONOMIC ISSUES

Questions regarding political or economic issues are popular but often prove to be “larger” than a student can answer in a relatively short period of time. In many cases specific expertise is also needed which the student may not have. In the absence of such expertise, a student may come away with misconceptions, anecdotes, or information which cannot be verified or interpreted. Even if the student has the necessary expertise, such questions typically do not lend themselves to investigation in brief electives. Such investigation may be better undertaken later, in residency or afterwards, unless *carefully* focused and defined.

COMMUNITY HEALTH NEEDS

Many aspects of the day to day delivery of health care lend themselves ideally to student projects. Medical training tends to be action-oriented. One moves rather rapidly from identification of a problem (or diagnosis) to intervention directed at that problem (treatment) and then modifies that treatment if it does not seem to be working. In other words, one moves directly from the perception of a possible problem, to imposing any one of the many possible interventions. Students in international settings typically try, as quickly as possible, to “identify a need” and then to mobilize some sort of activity directed at that need.

In planning a project, a student may be well advised instead to back away from such an approach, taking instead a more thoughtful and less precipitous approach to problem-solving. Such an approach, modeled on the concept of “community-oriented primary care” (COPC) for example, might be as follows:

- Identify and characterize the community or population one plans to target
- Identify a health care need.
- Identify and characterize current resources and health care services which are already being directed at that need in that community.
- By subtraction, characterize the unmet need.

One fundamental tenet of international health is that *there is no such thing as a community with no health care*. There is always a system of care in place, although parts of that system may not resemble Western biomedicine. By identifying needs, and the services already in place, one is then in a position to characterize those needs not being met by current services.

Such a project, which embraces fundamental principles of community health, is likely to be more valuable for student and host alike than a simple pre-planned rush to “do something” on a brief visit. Furthermore, it poses less danger to the host community, since the student’s primary role is to observe rather than intervene.

LOGISTICS OF HEALTH CARE DELIVERY

Many elements of health care which are taken for granted in the US cannot be so taken in other settings. At home, one rarely sees patients who have walked for three days to seek care, for example; and the range of medicines which are available in pharmacies does not depend upon which company the Health Minister’s brother owns.

Some logistic questions lend themselves to student projects. A profound problem in immunization, for example, is that of maintaining a “cold chain” to keep vaccines refrigerated and stable until they are used. Once a vaccine warms up, it may be useless. Keeping vaccines cold in a tropical country where there is no refrigeration even for foods is the type of logistic problem which a medical student may examine with a fresh perspective.

CROSS-CULTURAL CARE

PHYSICAL DIAGNOSIS

A common reason given by students for an international elective is to learn new, or better, techniques of physical diagnosis. The rationale is that, in a setting with limited resources and technology, there must be more reliance on the physical exam and therefore clinicians of necessity become more expert in examination.

In fact, this is not always the case. Excellent clinicians capable of teaching a comprehensive physical exam can usually be found at home; there is no need to go abroad. In fact, two factors may argue against finding such clinicians abroad. First, many medical schools outside the US place relatively more emphasis on book and classroom learning, and less on clinical training. And second, one looks for findings on physical examination that have clinical meaning. US students learn to carefully evaluate retinal pathology because there are resources to treat those conditions which produce it. Lacking such resources, there is less incentive to maintain such skills.

On the other hand, there are three excellent arguments which do justify the study of physical diagnosis abroad. First is that the range of diseases and their associated combinations of physical findings certainly differ in many parts of the world from those seen at home. Second, the clinical logic, and decision-making processes, may differ markedly from those at home and in many cases rely, not on different observations, but on astute and careful *use* of clinical information. Third, new techniques for taking a medical history can undoubtedly be learned in many international electives (see below).⁷

Western medicine has been described as “reductionistic” in the sense that medical training tends to restrict the range of information, and observations, which are considered relevant. Students are taught that we have been progressing “from superstition toward science” and that the goal of an expert clinician is to exclude the irrelevant and probe for the relevant in the history and physical exam.

In the process, a great deal gets lost! Many traditional systems of healing do not contradict Western medicine; instead, they expand the range of information considered relevant to health care. An illness may be interpreted, not just in terms of a symptom, but from the perspective of the losses that accompany the loss of comfort, of social role, of status, of independence, of economic worth. Healing may then concentrate on replacing what the illness has taken away, generally through the involvement of other people and sometimes the community as a whole.

There is profound logic to such an approach and, accustomed to such healing, a prospective patient may not be very impressed with a medical student who seems preoccupied with a single symptom or lesion to the exclusion of all else. Local healers may derive considerable power from their knowledge of the patient’s needs, expectations and perceptions and their insights into community relationships and roles. A medical student, learning to take a history, may gain much from such clinicians.

Dr. Gabriel Smilkstein⁵ points out that the practice of Western medicine does not necessarily preclude a respect and sensitivity for traditional forms of care. In many cases, patients who seek Western health care are also making use of traditional medicine. Traditional healers may very effectively treat and explain illness within the framework of local culture and on the basis of long-tested interventions. An open atmosphere which allows discussion of all of the care a patient is using can allow contradictory instructions (from different healers) to be avoided; it may also help to assure that traditional care does not delay medical intervention in treatable conditions such as typhoid or meningitis.

Dr. Carl Taylor⁶ points out that many health care issues may be recognized more clearly in a cross-cultural setting than in one’s own environment. Such lessons may then be “brought back” to the benefit of one’s home environment.

⁵ Gabriel Smilkstein, MD, was a William Ray Moore Professor of Family Practice, University of Louisville, Ky.

⁶ Carl Taylor, MD is professor emeritus, Department of International Health, Johns Hopkins University

WHAT ARE THE STUDENT'S MOTIVATIONS FOR INTERNATIONAL WORK?

One crucial, and stimulating, function of a faculty advisor is to help a student clarify what actually motivates the student to seek an international experience. This is sometimes almost impossible for the student to sort out alone; it takes introspection and sometimes a lot of conversation. The end result of such efforts, however—perhaps more than any other single activity—can help to optimize a student's experience abroad.

The underlying motivations of students are rarely an issue in most clinical training — unless, of course, they are not perceived as being motivated enough! The many reasons that one might pursue a career in medicine seem so self-evident, and so noble, that the only question for faculty is whether the student's drive is sufficient to carry him or her through the rigors of training - The nature of that motivation—whether it arises from idealism, an obsessive-compulsive personality, family expectations, or other sources—is not necessarily explored.

In fact, one function of faculty and of curriculum is to act as powerful motivators in themselves. Students must meet certain expectations in order to graduate. Some of these are formally defined (i.e., certain numbers of months spent in certain specialty rotations.) Others, such as professional demeanor, eagerness to learn, responsibility, collegiality, and willingness to carry a heavy workload, are less tangible but are likewise weighted heavily in evaluation.

International work almost always involves additional motivations as well. In some cases these may be at odds with the expectations of a student's local or on-site faculty; and in many cases, a student's exact motivations for international study may not be clearly recognized even by that student.

It is here that a faculty advisor may play a crucial role. By helping a student explore his or her motivations, a faculty advisor may help a student truly optimize the experience, and, in some cases, may redirect the student away from an experience which would not meet his or her needs.

The list of possible motivations for international work which follows has been suggested by students with whom we have worked over the years. While not exhaustive, this list represents a "starting point" from which any particular student's goals and expectations may be explored. No motivation, in itself, is appropriate or inappropriate, although some may be more compatible with certain projects than others. Each should be considered in the overall context of what the student proposes to do.

1. DESIRE FOR A BROADER PERSPECTIVE ON MEDICINE

This is, perhaps, the most commonly cited rationale for an international experience. Partly for that reason, it is the most difficult to "pin down" or to argue against. A shrewd faculty advisor will recognize that it is an "empty" rationale, for it could be used to justify anything that a student might wish to do. It is not a "bad" rationale per se; rather, it is not in itself an adequate objective for an elective by the standards of most medical schools; it must be coupled with more specific plans.

In our recent experience, a student asked to spend two months with a practice in a developing country "to gain a broader perspective." Asked exactly what she would do there, her reply was "Obviously I can't tell you that until I'm actually there. I can't assess what is possible from a distance; I will need to become familiar with local circumstances." Her advisor, uncertain how to argue with that rather non-specific logic, allowed her to go. No rotation in one's own teaching hospital would be approved on such slim planning!

Our advice is that a desire for "broader experience" alone should not be accepted as the sole purpose of any elective, particularly an international one; more specific reasons for the wish to study internationally are undoubtedly present and should be identified. Exploration for these other reasons might be started, for example, by pointing out that a number of other options—an Indian Health Service rotation, or a public health experience, or a clinical rotation at a different hospital—would also broaden the student's experience, and asking specifically why those don't fill the need the student perceives.

2. A WISH TO TARGET A SPECIFIC GAP IN THE EXISTING MEDICAL CURRICULUM

Students who grew up overseas or in a different cultural setting from those of their medical school, or who have traveled extensively, may recognize that their medical training has not provided experiences or insights relevant to settings in which they may wish to serve. A suburban hospital, for example, may provide limited experience relevant to United States inner-city practice, let alone to a *barrio* of a foreign city. Likewise, a student may have identified a legitimate question or technique that can only be explored through study abroad.

The reader should note the differences between this motivation—which is based on actual knowledge and specific perceived gaps in training that are to be targeted and remedied—and the first one discussed above, which has none of these characteristics. A rotation developed and undertaken by a student who can target a specific curricular gap may not only fill the needs of that student, but make a valuable educational contribution to the school and to future needs of other students. *The most successful student electives, in the author's experience, fall into this category.*

3. A WISH TO IMPROVE CLINICAL DIAGNOSTIC SKILLS

Depending on the student, this rationale may be either a strong or a weak one. Diseases, technologies, and diagnostic methods inarguably differ in much of the world from those in which United States medical students are trained. There is no question that highly technologic approaches to diagnosis, which US medical students learn, may be neither possible nor necessary in settings where clinicians must rely more on observation, logic, and skill than on technology. It is equally clear that clinical strategies which are of great value in international settings (oral rehydration therapy, patient education directed at children, or the disinfection of a water supply) may be quite unfamiliar to US medical students and absent from their curricula. A student who is sincerely motivated to learn such strategies from (rather than lecture at) health workers in other countries, may indeed have much to gain.

By contrast, some students have great difficulty identifying what they want to learn, or selecting a focus which might feasibly be accomplished in the time available. In that case, a desire to acquire new clinical skills may be no more focused than the first motivation discussed above, the desire for a broader perspective: impossible to argue against, but equally impossible to pin down. In such cases, a student's actual motivation may well be found in one of the other categories in this section.

As an aside, unique skills in many settings are not necessarily learned only from physicians or from people who speak English! Students who, in the course of training, have shown interest mainly in learning from those senior faculty who will grade them, and who have shown little interest in learning from fellow students, patients, nurses or others, can hardly be expected to learn avidly from a village health worker who speaks little English, even though a great deal might be gained from such a teacher.

4. IDEALISM

Almost certainly, some degree of idealism plays a role in any student's desire to work internationally. That idealism may be related to whatever led the student into medicine in the first place. It may be an excellent reason for a student to pursue international work. For at least two reasons, however, advisors should be cautious with a student motivated by idealism.

First, idealism, being an internal and personal thing, does not necessarily force a student to learn, to respond, or gain from what another setting has to offer. A sense of idealism may blind one to the real effects and impacts of one's presence and work unless that idealism includes responsiveness to others' wishes.

Second, what looks like idealism may simply be extreme compulsiveness. A student who is determined to overachieve may look at what s/he is currently doing and believe that it simply doesn't justify all of the training, motivation and hard work which have been invested in medical school to date. Such a student may logically seek a larger, more compelling, or more relevant stage on which to perform. The danger is that such a motivation has little to do with that stage; it has mainly to do with the student and his or her own needs, and the gratification of one's needs alone is not necessarily an appropriate rationale for work in a setting in which resources are already strained.

5. RELIGIOUS CONVICTION OR “SENSE OF MISSION”

Since religion plays a role in many students’ lives, and describes the source from which many of our ideals, and our very sense of *right* and *wrong* and *purpose* are derived, religion is undeniably a factor in many aspects of a decision to work abroad.

At the same time, based on experiences with a large number of students, this category of motivation, for the author, raises warning flags. As a more extreme example of idealism, the pursuit of an international experience out of religious conviction may not be related to the perceived needs, wishes, beliefs, or resources of those with whom the student plans to work.

Although religious conviction embraces a wide variety of other concepts, in many cases, it includes the concept that one knows what is right regarding questions that historically have enjoyed differences of opinion. This does not necessarily lend toward interaction, toward tolerance, or toward understanding in other cultural settings. It has occasionally led to profound misunderstanding, and to situations, in which a visitor has come into a setting, discredited local customs or beliefs, then gone away without filling the voids that have been created. In more extreme circumstances, provision of care, medications, or comfort have been denied to those who do not embrace particular beliefs; this does not optimize understanding or learning and may not promote the well-being of the host community.

It should be borne in mind that a student’s primary role is, by definition, to learn. If the student’s beliefs, vis a vis those found within the host community, are such that the student cannot take this role, the assignment of that student to that community should be reconsidered.

6. DESIRE FOR ADVENTURE

An advisor may smile when a student acknowledges adventure as one reason for going to another country, but undoubtedly some elements of adventure motivate each of us at some time in our lives. The excitement, the stimulation, the possibility of seeing something that can’t be seen back home are powerful and very “human” inducements. Like the “honesty checks” in some questionnaires, the acknowledgment of a wish for adventure may be regarded as almost a test of truthfulness, in that a failure to acknowledge any wish for adventure, even to oneself, may betray a significant lack of insight.

A search for adventure is consistent with almost any other motivation a student may describe. Medical students and residents are involved in a lot of new things—new social relationships, a new role, new behaviors, the new “language” associated with medicine, now work-related and leisure activities that come with the life of a physician, trips to conferences, opportunities to teach and to speak. Obviously, it is human to want to maximize the positive and enjoyable aspects of such activity when possible. A spirit of adventure is one way to do so; and an international experience is one way to indulge that spirit.

Having said this, let us point out that there is a definite “down side” in that a desire for adventure which is not acknowledged as such may have negative impacts. Every year there are students who, during the snowy months, express avid interest in going to study in a tropical location the next summer. As summer actually arrives, however, and the weather becomes hot, the idea of study in an unfamiliar and uncomfortable setting is likely to become less enticing. A certain number of students then typically drop out on short notice, regardless of time and resources which have already been spent. Thus a wish for adventure in a far-off setting and season should never be the *only* reason for international study.

7. ESCAPISM

Unlike the desire for adventure—which is proactive, positive and a desire *to do* something—escapism is largely distinguished by the fact that it specifies what will *not* be done (usually things which the student is already doing, but not enjoying, back home).

It is not surprising that, in the sometimes painful process of medical education, a student will occasionally believe the grass is greener somewhere else; that better approaches to medicine or to life may exist in places other than at home; or that the tedium or pressures of medicine demand a “breather” away.

Like the “honesty checks” in some questionnaires, the acknowledgment of a wish for adventure may be regarded as almost a test of truthfulness, in that a failure to acknowledge any wish for adventure, even to oneself, may betray a significant lack of insight.

An advisor should be careful to distinguish adventure, which is a positive, motivating force *toward* something, from escapism, which is a motivation *away* from things that one doesn't want to do. Escapism does not in itself define a target, an activity, a need, or a strategy. It seeks primarily to avoid.

To recognize that escapism is a student's real motivation may be very difficult. Often the student does not perceive it; and because escapism does not have positive defining characteristics (being mainly defined by what *isn't* going to be done), this manual cannot necessarily describe how to recognize it. One should suspect this motivation, however, in cases where a student wants an international experience—wants it, sometimes, with great intensity—We cannot specify the details of the experience that is sought. The less the student can define what will be learned or who will be served, the less likely it is that a proactive rationale is the basis of the experience.

In a few cases, a student motivated by escapism will indeed provide a very concrete image of the experience which is sought. The clue, which lies within that image, is that the described experience is characterized by its *differences* from anything the student is presently doing; and efforts by the advisor to discuss mundane details, or to introduce familiar clinical elements into the proposed experience, are met with dismay or resistance. In such a case, the advisor may reasonably question whether it is the difference from present reality—not the content of the proposed experience itself—which is actually attracting the student.

One danger in escapism as a motivator for international work is that it is unlikely to be gratified for long. Some degree of culture shock, in particular, is likely to occur and may only aggravate the student's sense of dissatisfaction or unhappiness by the end of the elective.

Is escapism an undesirable motivator? In our experience, students who are chronically unhappy on domestic rotations, tend to be unhappy on international ones as well, at least after an initial “honeymoon” of relief at being away from previous demands. There may indeed be a student, frustrated with United States rotations, who finds relevance, meaning and satisfaction in international practice. But in that case, escapism was probably not the issue.

B. THE AVAILABILITY OF A “CONTACT PERSON”

In some cases, a student first asks to spend time in an international setting because a friend, acquaintance, or contact person recommended by someone else, becomes available and offers to work with the student for a period of time.

Inexperienced advisors, in our experience, tend to brush this off as an invalid reason for an elective. However, as discussed in a previous section of this manual, the single most important element in international work may be the on-site supervisor, or host, with whom a student works. Assuming that other factors, including the compatibility of goals and objectives, are worked out, this may be a highly appropriate rationale for an international elective.

9. THE AVAILABILITY OF A READY-MADE SITE OR OPPORTUNITY

To choose an international rotation based on a *person* may be reasonable; to choose one based on a *site* often is not. This distinction may not be intuitively obvious to an advisor who ordinarily tells students to choose a hospital, a specialty, and a time of year, in that order; exactly whom they will work with is often left “up in the air” and will depend on which faculty are there at that time. In international work, however, as discussed at the beginning of this section, the opposite may be true. The person to be worked with, then the time of year, the setting, and the country are ideally prioritized in that order, and to choose the setting or country first may be unwise. Going to New Zealand for a month just because another student did so and “liked it” should never be accepted as an adequate rationale.

10. POLITICAL CONVICTION OR PHILOSOPHY OF HEALTH CARE

Students or residents may wish to visit a country, not to learn clinical medicine, but out of interest in the impacts of a political or economic system on health care delivery. Akin to political conviction may be a wish to see a certain philosophy of health care, such as community-oriented primary care or “barefoot doctors,” in practice.

The advisor should realize that, unless the student has had extensive preparation, study of such questions during a short visit may lead to stereotyping or to misconceptions, and its value as an educational experience may be questionable. Experiences of this type may be relevant, but they require an unusual degree of preparation.

A student who can honestly acknowledge that his or her real need is to take a vacation deserves credit, and such honesty bodes well for their future career. At the same time, please see the cautions (above) concerning adventure as a motivating influence.

12. DESIRE FOR A VACATION

Some dangers in planning an international elective primarily so the student can accompany a “significant other” have already been addressed. In such circumstances, the elective itself may not be the goal and may even be viewed as a nuisance or as an obstacle to things that the student would rather be doing.

13. INTERNATIONAL PLANS OF A “SIGNIFICANT OTHER”

If a student really wants a vacation, that is what s/he should take. The term *vacation* is not used here in a negative sense; it embraces all of the reasons people travel abroad—for self-fulfillment, gratification, unwinding, interacting, or doing nothing. The point is, if the student’s real wish is to be at the beach, or participating in festivals, or archaeological digs, or other activities, s/he is not going to be happy examining babies all day in a pediatric clinic instead. The patients may not benefit either, since the work of an uninvested student may be suboptimal.

On the other hand, if the student seriously wishes to plan a meaningful elective, such a student may potentially start with a truly clean slate, ready to make the most of the experience, to view it with objectivity, and to approach it without preconceived opinions, derivative needs or false expectations.

14. SUMMARY COMMENTS

Dr. Gabriel Smilkstein⁵ cautions that motivation may not be equated with performance. What a person says they will do, or why they do so, may be less significant than what they actually do. Escapists, adventurers and religious fanatics may do superb work in the field, while individuals identified as altruists, philanthropists and universalists may be inept and inappropriate in their work and relationships.

In this section, we have not addressed another crucial question concerning motivation. Given that there are international settings of great need, is it ever reasonable, or justifiable, to question the motivations of a student who wishes to serve there, or to potentially discourage him or her?

This manual discusses several issues which relate to that question, but cannot provide an answer per se. For that, a dialog among student, advisor, and above all, the people and the setting in question, will be crucial. Unfortunately, too often no such dialog takes place.

THIRD CHECKLIST: SPECIFIC DETAILS OF THE ELECTIVE

EXPLORE STUDENT'S RELATIONSHIP WITH THE ON-SITE SUPERVISOR

HAS A HOST BEEN IDENTIFIED?

REVIEW THE LETTER OF AGREEMENT REGARDING:

- DATES OF ELECTIVE
- PLANS FOR MEETING THE STUDENT
- HOUSING
- MEALS
- WORK SITE AND FACILITIES
- LOCAL HEALTH CARE FOR THE STUDENT
- HOW WILL MONEY BE DEPLOYED?
- HOW CAN THE STUDENT BE CONTACTED?
- HOW WILL THE STUDENT BE EVALUATED?
- WHAT IF THE LETTER DOES NOT CONTAIN THESE?

LOGISTIC DETAILS:

- PASSPORT
- VISA
- IMMUNIZATIONS
- INSURANCE
- LICENSURE AND MALPRACTICE INSURANCE
- HOW COMPLEX ARE THE ARRANGEMENTS?
- HOW MUCH DEPENDS ON FACTORS BEYOND STUDENT'S CONTROL?
- IS THERE A FALLBACK OR CONTINGENCY PLAN?

WHAT IS EXPECTED OF THE STUDENT ON RETURN

- HOW?

DISCUSS ISSUES WHICH WILL FACE THE STUDENT ON SITE:

- ADJUSTMENT TO THE NEW ENVIRONMENT
- SCHEDULES AND PACING ONESELF
- LIVING ARRANGEMENTS
- FOOD AND WATER
- ANTICIPATE MONOTONY
- CULTURE SHOCK
- THE WHITE COAT AND STETHOSCOPE
- PROTECTION AGAINST SUNBURN
- LAST MINUTE ITEMS TO BRING
- FOLLOWING ADVICE UNDER REAL-WORLD CONSTRAINTS INTERPERSONAL AND GENDER RELATIONSHIPS
- WHAT MISUNDERSTANDINGS MIGHT BE ANTICIPATED?
- PROTECTION OF THE STUDENT'S OWN HEALTH
- WHAT IF THE PROJECT PROVES IMPOSSIBLE TO CARRY OUT?
- WHAT DISTRACTIONS ARE LIKELY TO ARISE?
- WHAT TYPE OF JOURNAL WILL BE KEPT?

THIRD CHECKLIST: SPECIFIC DETAILS OF THE ELECTIVE

When arrangements are finally falling into place, a faculty advisor may be tempted to let the student take care of final details. In fact, however, those final arrangements may determine success or failure for the experience; and in each of them, a faculty advisor may be invaluable for several reasons.

The letter from the proposed supervisor represents, in a sense, the visible “focal point” of the entire experience, since it provides the only tangible evidence that the student’s project will actually be carried out. In most cases, however, such letters are sadly inadequate.

A typical letter contains two or three paragraphs, essentially as follows. One paragraph expresses pleasure that the student is coming and offers assurances that an excellent educational program is being arranged. The second describes the person writing the letter in terms of titles, degrees, and staff positions, and perhaps says something about the organization or setting in which the student will work. The third paragraph expresses thanks and a wish to have continuing relations with the student’s medical school.

Following the receipt of such a letter, the student may arrive to discover that the proposed supervisor is out of the country for three months—and that nobody else knew that a student was coming.

What went wrong? In many such cases, the selection of a supervisor was done as an afterthought, when the student had already chosen a country and a project and then learned that a letter of support was needed. Under such circumstances, the task of writing such a letter was triaged to a person whose administrative position made it appropriate to write such a letter, but with no other relationship to the proposed elective. (In fact, such things happen anywhere; if you wanted to greatly honor a foreign visitor to your own medical school, you might ask a high-ranking person, such as a dean, to extend the welcome, without expecting that person to actually host the visitor.) What should be done to avoid such a problem?

WHAT IS THE STUDENT’S RELATIONSHIP WITH THE ON-SITE SUPERVISOR?

In the first place, **establishment of a relationship with the supervisor should come *first*, not last.** The other elements of the experience—the project, the setting, endorsement, support—depend on that person, who should never be added as an afterthought at the end! This individual should be invested in the project, responsible for the student and in some way rewarded for his or her role. It is hoped that the relationship will have been established and tested *before* letters must be written.

HAS A HOST BEEN IDENTIFIED?

Particularly on a short elective, there is a great deal to be accomplished in a very limited time. A logical approach in such cases—which, for some reason, may not occur to visitors from the United States—is to identify a trusted individual who can teach one the “unwritten rules” and behaviors expected in the community, introduce the student, and in effect “take responsibility” for the student’s behavior. The individual who does this may or may not be the same person as the student’s supervisor.

It is likely that something will be expected of the student in return for the hospitality and education which is being offered. Sometimes this expectation is not evident to the student! Through a trusted host, such questions may be explored so that good will, rather than frustration and mutual anger, will result.

A student should use some caution in identifying whom this trusted individual will be; for the student may inherit this person’s enemies along with his/her friends. A case in point is that of a particular student who was “adopted” by a kindly and seemingly respected physician. Unknown to the student, that physician was locally believed to be engaging in “human experimentation,” using untested drugs and surgeries. Through association with that physician, the student of course was believed to be doing the same things. Only later, when numerous doors remained closed, did the student become aware of this misperception.

REVIEW THE LETTER OF AGREEMENT AND THE UNDERSTANDINGS REGARDING:

DATES

An obvious problem arises when the student arrives on site and the proposed supervisor turns out not to be there. In some cases this is inevitable; in many parts of the world, people take a long view of time and of appointments and that is simply the norm. However, any of three avoidable problems may have occurred:

1) *It may have been assumed that the student knew more about local customs and schedules than she did.* Imagine, for example, that a US clinic rotation is scheduled to begin on Christmas Day. Students know from experience that on a holiday such as Christmas, most clinics aren't open. A student would know that the rotation would in reality begin on the next working day after Christmas. A foreign student working here would be expected to learn such rules; and the same may reasonably be expected of US students going abroad. Such 'rules' of a community a student plans to visit could be learned ahead of time, but often are not.

2) *The student's arrival may not have been the most important event in the world for the host.* Simply notifying the host of the arrival date - in a letter which may never even have arrived - does not guarantee that the student's arrival or elective will be a high-priority event. Every effort should be made to confirm that the date is understood, agreed upon, and reconfirmed before arrival. One might wish to arrange some sort of "welcoming ceremony" in which many people are invested.

3) *The host may have been offended in some way.* Usually medical rotations are thought of as starting on their official start date. If one is going to get into trouble, it will be after that. But an international rotation involves planning and relationships which extend well before, and after, the actual experience. Misunderstandings may be generated before the student ever arrives! This is one reason not to take a cavalier attitude toward early arrangements and letters. It may also be an added argument for having a fallback plan.

PLANS FOR MEETING THE STUDENT

In most settings one can't just stop off the airplane and into an airport limousine and whisk off to clinic! The logistics of airport, customs, inspections, and taxis may dismay any student, even an experienced one; it is helpful to have an experienced person there as a guide.

HOUSING

Ideally more than one choice will be available: perhaps temporary housing for a couple of days, while the student gets to know the community, followed by an opportunity to select among several options.

Where one lives has implications. One may learn more and find more friendship through living with a family; but some students are not used to that and prefer a dwelling of their own. To live in an "American compound" far from the village where one plans to work may convey a message. It takes a while to learn the "rules" before plunging into such decisions.

MEALS

In this case, too, preferably the host will make arrangements for the first few days, after which the student can begin to take responsibility. One can, of course, bring enough food along in a suitcase to manage for quite a while on one's own. Meals, however, are likely to be a social as well as a nutritional event, and this is lost if one eats alone.

WORK SITE AND FACILITIES

Medical students on Third World electives are often surprised to discover that, if a clinic or hospital is to function, they themselves have to help in keeping the physical plant operational. Latrines may cave in after a downpour, a hospital washing machine may give out, the soap may disappear, the pharmacy may run out of medicines, the water may be shut off, or the ambulance may not run for lack of gasoline. In such circumstances, little can be done until people pitch in, with work and sometimes with donations, to restore function. While a student may regard this as an unfair imposition or as “exploitation,” sometimes it is a necessary norm.

LOCAL HEALTH CARE FOR THE STUDENT

Medevac insurance may allow a student to be airlifted out in the event of severe illness or injury; but for minor illnesses or dental problems, most likely the student will be dependent on local sources of care. It is wise to inquire into these and perhaps to bring basic supplies (such as sutures or antibiotics) if a need is anticipated.

HOW SHOULD MONEY BE DEPLOYED?

An important and often-overlooked element of a confirmatory letter is a description of *how to contact the student* should there, for example, be an emergency back home. A phone number or address is *not* adequate! Numbers may change or phones be intermittently out of service. Moreover, people aren't always near a phone or post office and, even if they are, it may not be functioning. Suppose several students are to meet in a community and some do not arrive. How are the missing students to be located?

Disagreements over money have been the downfall of many an excellent international elective, and often the student never realizes what happened. A student's unwillingness to hire a maid, or cook, or driver for small amounts of money may mean that people who hoped for temporary employment during the student's visit now have no work. Whether rent is paid in dollars or in local currency may make a profound difference in settings with active black markets. How much is paid in advance, and how far in advance, may determine the success or failure of an experience. In a setting of high annual inflation against the dollar, exactly how far ahead of time one pays, and in what currency, is obviously of significance.

Many of the norms of international work - the necessity of buying medication oneself if one wants a patient to have it, the pervasiveness of bribery, the expectations of gifts - are not only perplexing to students, but may give a sense of being exploited. It may offend the sensibilities of students who see themselves as idealists not concerned with material rewards.

HOW CAN THE STUDENT BE CONTACTED?

One suggested and well-tested approach is to agree upon a single telephone number (of a trusted third party, often in the United States) which anyone can call should anything go wrong. In the case just as described, the missing students, as well as those who arrived, know what number to call in order to learn one another's whereabouts. The author has found this approach to be invaluable on excursions inside as well as outside of US borders.

HOW WILL THE STUDENT BE EVALUATED?

In keeping with any clinical elective, the agreement should also specify criteria for deciding if the student has or has not met expectations, a description of the project or work to be undertaken and of the student's role in that work, and some form of a timeline. It is not enough to say that "details will be arranged according to the student's needs" or that "the student will participate and observe."

WHAT IF THE LETTER DOES NOT CONTAIN THESE DETAILS?

The details described above are a lot to expect from a letter of agreement! Unfortunately, the document which is actually received (if one is received at all) may lack most or all of this information.

The student may wish to draft the letter of agreement and send it to the on-site mentor for signature or modification. This assures that at least the fundamental details have been agreed upon. Students may hesitate to "press the issue" out of fear that they will offend or insult the proposed supervisor by implying that adequate arrangements are not being made. However, it is almost always safe for a student to outline the understandings and send them to the on-site supervisor as a memorandum of understanding, rather than require the person at the other end to originate the document. That person may then correct any misunderstandings and send the letter back.

LOGISTIC DETAILS

PASSPORT

More than one experience has ended before it began because a student forgot, or did not know, to obtain a passport and visa. Sometimes someone who is used to dealing with packaged tours to popular tourist destinations does not realize the student's different role and gives incorrect advice. Sometimes obtaining a passport simply gets "put off" until too late. As a rule, it is wise to *always* assume a passport will be required, and to *always* have an up-to-date one at hand. That allows the student to begin the process of obtaining a visa at the earliest possible opportunity, which is particularly useful if plans change and a different country suddenly becomes the goal.

VISA

Visas are not the same as passports, as some students discover every year! Obtaining a visa may be a long and drawn-out process, which should be started *early*. When the visa is obtained, *one should make certain that it covers a period longer than one's intended stay* in the host country. One or two days longer is not enough and one should never assume that it is! If something comes up (a natural disaster, an illness, a missed train or plane connection) and one outstays one's visa, the consequences may be dire even in "friendly" countries!

IMMUNIZATIONS

Immunizations are another consideration which may be put off until too late by students who don't realize that they must have certificates of vaccination to visit many countries. Some of those vaccines, such as yellow fever, are not available just anywhere. Increasingly, travelers' clinics, as well as State and some local health departments, offer up-to-the-minute advice as to which immunizations are required for which countries. One excellent source of information concerning required vaccinations is a small Department of Health and Human Services publication called **Health Information for International Travel**, publication (CDC) 88-8280. This is available from the Superintendent of Documents, US Government Printing Office, Washington, DC, 20402, 202-783-3238.

INSURANCE

Insurance may be discussed with one's agent (auto insurance, for example, may not apply outside US borders). One type of insurance which is often overlooked is called **Medevac Insurance**, which guarantees that, in event of a media emergency, one will be rescued, by helicopter, if necessary, and transported to a source of modern health care. It is not expensive, and to arrange such evacuation after the fact is both difficult and costly.

LICENSURE AND MALPRACTICE INSURANCE

Licensure and malpractice insurance are often not considered either by students or advisors, perhaps because they are rarely an issue on domestic (United States) rotations. Students, working under supervision, may or may not be adequately covered; residents should *never* assume they are covered either by licensure or by malpractice coverage. It is impossible for this manual to give comprehensive advice except to point out that assumptions should not be made, that what applies to one student or school may not apply to another, and that it is wise to seek the (usually free) advice of the school's or residency program's attorneys.

HOW COMPLEX ARE THE ARRANGEMENTS?

It is hardly unusual, in modern United States life, to follow a schedule full of events that depend on one another. One may get up in the morning, drive by an automatic teller bank machine to get cash; fill that tank at the gas station; drive through a fast-food restaurant for breakfast; then drive to work, take a chance on finding a parking space, and get inside in time to finish yesterday's work before anyone asks for it. If the cash machine didn't work, gas couldn't be bought, one couldn't drive to the restaurant, and so on. In other words, such a lifestyle involves a series of steps, each of which depends on other steps.

That sort of lifestyle, which North Americans tend to take with them wherever they go, doesn't work in a lot of places! Any step which is dependent on previous steps in a sequence, is likely to go awry. A student planning to work in another country is instead advised to plan life in simple, individual processes which are not interdependent.

What does this mean in practice? Consider a typical caravan of vehicles driving from the United States into Mexico. They agree to cross the border separately and meet at a certain checkpoint several miles into Mexico, at which point one vehicle will lead the others to the destination.

What happens if one vehicle doesn't appear at the checkpoint? Nobody in the group can go forward, for they don't know where the missing vehicle got lost, and that vehicle, in turn, will have no way of finding the destination if the group leaves. As a result one vehicle may be sent back to find the stray; if that vehicle is delayed in Customs, now two are missing. None can go until all are back together. A better plan would have been to give each vehicle full directions to the destination, and let each proceed on its own. That way the entire group is not stranded because of any one member. One or two may be later sent back to find any strays.

HOW MUCH DEPENDS ON FACTORS BEYOND THE STUDENT'S CONTROL?

Life in the United States involves many services which are counted on to be dependable: electricity, running water, open hours for stores, public transportation and so on.

None of these can be taken for granted in many settings! Buses may not run until they are full (which means extremely full in many cases); appointments are kept late or not at all; stores don't open if the storekeeper has something else to do; water may be off for weeks; electricity goes on and off. A student may do well to note the services and resources which s/he takes for granted in the course of a day, and consider ahead of time how to cope if any of them were suddenly lacking.

IS THERE A FALLBACK OR CONTINGENCY PLAN?

In view of the preceding discussion, it seems obvious that the wise student will have at least one contingency plan which may be resorted to should the primary arrangements fall through.

Some students plan a second possible elective in a different country altogether. For a variety of reasons, however, this is difficult to accomplish; and the fact that an elective will not work out may not be obvious until the student is on site.

For such reasons, therefore, it is preferable that the contingency plan be worked out in the same site as the original plan. The contingency plan should include other individuals with whom the student could work should the supervisor prove unavailable. Ideally, each project should be negotiated with *each* of these other individuals.

The advisor should be a part of this process. S/he is likely to have final approval of each of these projects. An advisor may grumble, for the preparation of several contingency plans is not a part of the normal advising process for US rotations; but those additional plans do not necessarily represent wasted time even if they are not used, for another student may wish to pursue one of them in a future elective.

WHAT WILL BE EXPECTED OF THE STUDENT AFTER RETURNING HOME?

If an experience is really worth a student's time, then it follows that the student will return home with knowledge, skills, or attitudes which are worth sharing with fellow students or with the faculty. It seems not unreasonable to ask that any student who participates in an international elective should come back prepared to share new knowledge acquired during that elective. This might be done through a paper, a lecture, or an informal class offering. Agreement should be reached *before* the elective concerning what the student will be expected to do after the experience.

WHAT ISSUES WILL FACE THE STUDENT ON-SITE?

The international elective is finally beginning, passports and visas have been secured, tickets purchased, and the student is about to leave for the airport. At this point, everyone breathes a sigh of relief.

To the advisor, much of the work now seems to be over. Little remains to be done until the student returns to report on the experience.

For the student, too, it seems time to relax. All of the arrangements are in place, an exciting experience is beginning; and the routine of medical school has definitely been broken.

Yet this is the point at which trouble is most likely to begin. Until now, the student has been safely at home, and plans were all which could go wrong. Now, the adequacy of those plans—which may have been developed with little real information on anyone's part—are about to be tested!

The plane lands on the runway. Cattle, even people may be strolling about the landing strip. The temperature, humidity, shape of the clouds, smell of the air are all new. The soil is an unfamiliar color and texture, and exotic-looking plants wave in the breeze.

After going through customs, the student would like to use a rest room. A toilet of sorts is located, but the familiar equipment is not present, and no toilet paper, towels, or sink can be found. Puzzled, the student now thinks that perhaps it would have been wise to have brought along such basics as toilet paper. It is also painfully obvious that none of the clothes the student has brought are going to be comfortable in this temperature and humidity.

Then comes a long wait in front of the airport. The host who was scheduled to meet the student is nowhere in evidence. Perhaps the student should try to telephone him. But the telephone is completely unfamiliar in design and does not seem to be connected to anything. Someone walks up, begins to speak loudly in an unfamiliar language, and becomes obviously angry when the student does not respond. Perhaps, the student thinks, this person wants to use the phone. But that doesn't seem to be the problem.

At this point, no more than ten minutes after landing, the student is starting to feel apprehensive. The unfamiliarity of the setting has become obvious, and none of this was foreseen in the plans. Were these problems avoidable?

In fact, the relatively minor difficulties discussed above could probably have been resolved in large part through careful planning alone. There are other difficulties, however, which can not always be foreseen, some of which will be discussed in the following pages.

ALLOW ENOUGH TIME TO ADJUST TO THE NEW ENVIRONMENT

One means by which a student may facilitate a complex transition such as that which was just described, is to allow enough time for it to happen! In many cases, and especially if they have only a short time in a foreign setting, students want to "hit the ground running" and do as much as they can from day one. This is unwise from all standpoints including one of health. One student we know, arriving in a tropical country from a cold climate, began immediately unloading crates from a truck within minutes of arrival. This intense exertion, in high heat and humidity, at the heat of the day, led to several days' illness and the failure of a project the student had intended to carry out.

Opinions vary as to the length of time required for orientation—from a minimum of a few days, to two months in very unfamiliar environments. During such a period, the student may play tourist, learn where things are, and determine what is feasible before committing to a course of action.

It may seem unrealistic to spend a week, out of a four week rotation, just getting oriented. This does not mean that the one week orientation is too long. It probably means that the one month rotation is too short.

SCHEDULES AND PACING ONESELF

Students unfamiliar with international work may plan on working all day, just as they would back in the United States, without noticing that other people don't follow that schedule. If they did look, they might discover that people go out to work well before dawn, rest indoors during the heat of the day, and are out again in the evening, with markets open and shopping done in the cool nighttime hours. Such a schedule makes far more sense, in an extremely hot climate, than the 9-to-5 schedule of the United States!

One reasonable way of pacing oneself is to watch what other people are doing, and learning why things are done as they are. Unexpected explanations—such as insects or sunburn—may explain why people avoid certain areas, garb as they do, or remain active at certain times of day.

LIVING ARRANGEMENTS

As previously suggested, ideally the supervisor or host will arrange housing for the first few days. A student may not realize that where s/he subsequently chooses to live has numerous implications from the standpoint of local politics, for meanings will certainly be read into the student's choice.

A student may be offered housing which is apart from the village, clearly reserved for United States visitors, or located in a particular neighborhood which is different from that of the persons with whom the student hopes to work. In the United States, the implications of such segregation might not seem great. In a small village in a foreign country it may have significant implications.

FOOD AND WATER

A frequent tendency is to bring along, or purchase, a lot of familiar food and to stick to that. However, such foods may be neither practical, nor appropriate, in the new setting. They mold, or attract insects, or do not taste good in combination with local ingredients.

One alternative, which a student may not think to consider, is to hire someone to cook or to shop. The idea of having servants, as previously described, is immediately rejected by many students who do not realize that hiring people can help in the adjustment to a new setting, and may enrich the local economy as well. It provides jobs where there were none before, builds relationships, and is much more efficient than trying to do everything oneself.

Furthermore, cooking is rarely a matter of switching on a microwave or electric stove and popping in a dinner. A gas flame may need coaxing to light at all; one can easily spend the better part of a day boiling water, going to market and cooking one dish at a time; it may be very necessary to hire others to do this. One can also learn a lot about cooking techniques in this way.

Dennis Mull, MD, who for years has worked with students abroad, offers the following specific advice:

“Tap water and restaurant water, including ice cubes, are always suspect; the consequence of using them will often be a severe case of diarrhea, which may ruin the elective; at worst, more serious infections, hospitalization, and chronic sequelae may result. Even polio is still a possibility and of course there is no treatment for this paralyzing and sometimes fatal disease. Polio is obtained from water contaminated with human feces and this is just one of many infections that may be avoided by not drinking water that is not potable. Bottled Coke and beer are generally safe as long as ice cubes are not added.

“Thought should be given to ways in which contaminated water can be inadvertently consumed. Normally it is wise to avoid all uncooked foods and vegetables, including green salads and salsas and any fruits other than those where the peel can be safely discarded, such as a banana.

“In general, well-cooked food, served hot, is not a problem. Likewise coffee that has been prepared with well-boiled water. Milk is often not pasteurized and both milk and cheese are advised against unless the pasteurization status is known.

“In a coastal village it is a great temptation to eat shellfish. Unfortunately, the risk of hepatitis is great and even Julia Child has given up shellfish because of the difficulty of quality control. Any other kind of well-cooked fish or lobster is usually safe, but clams, mussels, and oysters are to be avoided, particularly if they are raw!

“The list of things that must be considered in order to stay healthy is substantial, but once they become a habit they may become automatic. The danger is the period before they become a habit, when one inadvertently uses tap water for brushing teeth or something else that at home is done without thinking. Remaining cautious around water or liquids goes a long way toward protecting one.”

Dennis Mull, MD, MPH, is presently chief of party, Pakistan Child Survival Project, Management Sciences for Health. USAID/Islamabad, Washington, DC 20523-81 00.

EXPECT MONOTONY

Particularly in tropical countries, students frequently comment on the monotony of a setting in which every day seems the same (hot and humid) for weeks on end. It may even rain at the same time every day, and one week melts into another with little to distinguish the passage of time.

Although an explanation for the phenomenon is not immediately obvious, such monotony is described by students as producing a peculiar type of depression: a sense that “nothing is happening,” “no progress is being made” or “there is nothing to look forward to—one day is the same as another.” Students may counter this, if they find it odious, by planning some deliberate variety into their days and schedules; by traveling at intervals (for example, into mountains where it is cooler,) by choosing settings where the climate is less constant, or by varying the hours at which they are active.

Food, like climate, is apt to be monotonous. In some parts of the world, breakfast, lunch, and dinner all consist primarily of rice and beans, or cassava, or lobster! At first, these new foods may taste delicious. Gradually, the student finds his or her appetite waning due to the monotony. A mealtime may pass with nothing eaten. Finally, the student realizes an entire day has passed with no appetite and no meals eaten. The idea of rice and beans, again, simply has no appeal.

Almost any new or exciting item, at a time like that, may not only revive one’s appetite, but may make the staple diet seem somewhat palatable again. A jar of peanut butter is often identified as that exciting item; if one likes peanut butter, bring it along! Most of us don’t give much conscious thought to making ourselves eat. In a tropical setting, that may become necessary!

The problem is not confined to students. “Lack of appetite” was one of the most frequent complaints among patients who were seen by students in a recent summer program in Mexico. Having experienced it themselves, those students were uniquely able to understand this monotony-induced condition, although it may seem incomprehensible to one who has not experienced it.

CULTURE SHOCK

In courses in cross-cultural medicine at the University of Minnesota, students are exposed to a model, loosely based on a developmental model by Milton Bennett⁷, which describes stages of adjustment to a new cultural environment. A brief summary of our interpretation cannot do justice to Bennett’s original model, but it does help to indicate what is meant by culture shock.

Then comes a realization that the setting is less familiar than one first thought. There may be a misunderstanding with another person, or an assumption is made which turns out not to be true. Eventually it becomes apparent that *many* things are unfamiliar and cannot be taken for granted. This may be painful and one’s reaction may even resemble grief.

Eventually, one comes to appreciate the ways people are doing things, and even the reasons for them. One begins to make use of that understanding, and ultimately is able to assimilate the other culture.

⁷Bennett MJ: A developmental approach to training for intercultural sensitivity. *International Journal of Intercultural Relations*. 10:179-196, 1986

At this stage, one grasps for basic elements of the new culture which seem familiar or logical; or, on the other hand, one may try to discover tricks or rules to succeed in the new setting, as though a simple modification of one’s accustomed ways of doing things is all it takes to function in a different culture. At some point, one comes to realize that this won’t work, just as one learns that translation is not simply a process of replacing each word in a sentence with its counterpart in another language. This is a crucial step in realizing that the other culture is not just another (and often inferior) version of one’s own way of doing things; some students never make it through this step.

According to the model, a common, early reaction of a student to a new setting is to feel that the setting really isn't unfamiliar at all. For example, a family spending a weekend at a Caribbean resort may return home to remark that it seemed just like being in the United States.

The reader may recognize similarities between the process just described, and the experience of a medical student becoming a doctor (ie, moving into the culture of Western medicine with its beliefs, values, behaviors and vocabulary.) Medical students have found that this model explains the pain and loss of identity which sometimes accompany medical training. It also explains the growing sense of well-being and acceptance they feel as they come to resemble the interns, residents, and clinicians around them.

It may be that a student already in the midst of the culture shock of medical training is particularly vulnerable to the symptoms of culture shock on an international rotation. We have not found an answer to this question, but it reinforces the idea that students may best pursue an international elective late in training as opposed to the more vulnerable period of late third-early fourth year medical school.

THE WHITE COAT AND STETHOSCOPE

A mistake made as often by faculty as by students is the failure to bring white coats or stethoscopes on an international rotation. The idea of walking along a dirt road, under palm trees, in sweltering heat in a hospital coat and tie and a stethoscope may seem so incongruous that one decides to wait and see what doctors wear locally and then dress that way.

Doctors locally probably wear white coats and stethoscopes. In fact, one may simply not be accepted as a doctor, even by other doctors, without these. When in doubt, take them along.

PROTECTION AGAINST SUNBURN

Sunburn is always a hazard and, even if one takes the normal precautions, near the equator parts of the body may burn that never burned before — such as the scalp, even under thick hair, or the feet. As a rule, our cultural tendency to remove clothes when it's hot may be inappropriate as a first step in tropics or at high altitudes. A scarf or sombrero and a high collar make excellent sense, particularly if the student notices that others are wearing them.

LAST-MINUTE ITEMS

There are a few small items which can make a difference one's first day "on site." A roll of toilet paper and paper towels are always useful. So is an extra toothbrush. A cup, small towel, a sheet (which can be slept on or folded as a pillow,) a flashlight, and an umbrella or raincoat may also prove invaluable. It is useful to bring along at least one paper bag for use as a trash can until a more permanent means of trash disposal can be identified.

One other useful item is a small, pocket tape recorder (with extra batteries and tape!) When people are talking rapidly, particularly in a foreign language, and one can't follow everything they are saying, a recorder can capture it for later study.

FOLLOWING ADVICE UNDER REAL-WORLD CONSTRAINTS

Advice which sounds excellent at home may be difficult to apply under real-world circumstances. For example, suppose someone offers fresh fruit to a student working in a village. To refuse the fruit, the student may realize, is an insult; accepting but not eating the fruit may be equally so. The frequent outcome is that the fruit is eaten (unwashed) with the student hoping for the best.

Yet the person who offered the fruit may not have expected it to be eaten! Ironically, the student may have eaten it only because, when one is offered food in the United States, the range of possible responses is not very great. One may eat it, refuse it, or subtly dispose of it. In other societies there are far more options! There are many ways a host's gift can be acknowledged, or honored, or repaid, other than by simply biting into raw unwashed fruit. *This is one reason it is so crucial to have a sponsor or host to interface between oneself and the community and to clarify expectations and options.*

INTERPERSONAL RELATIONSHIPS

Perhaps more than any other aspect of their experience in another country, students often comment on issues which have arisen which concern interpersonal relationships. Relations between the sexes, and other "norms" of behavior are a frequent cause of bewilderment. To a woman, having a total stranger come up and ask to marry her may be disconcerting. So may the "wolf whistles" and stares from men that are so common in so many places. In a clinic where women and children are being treated, an adult male patient may expect to be seen as soon as he arrives no matter how long others have been waiting; this may seem unfair to United States students who refuse to oblige, with lasting implications. One student found that by padding her clothes to appear pregnant she could discourage wolf whistles, but this strategy, obviously, cannot be used for very many months in sequence.

Among male students, accustomed to punctual and clearly defined working relationships with other men, a commonly reported frustration is that of making an appointment with someone, confirming the time, then arriving to find that the other person does not appear. This is apt to be interpreted as a deliberate and aggressive act, but in fact the complex unwritten rules that govern when one appears for *any* social event may not seem very logical.

MISUNDERSTANDINGS

Misunderstandings are likely to arise between the student and other individuals involved in the elective; in fact, they are almost *call* to arise to some degree in cross-cultural settings. The essence of culture is that one takes certain assumptions and behaviors for granted. In a cross-cultural setting, this doesn't work; some of the reasons are outlined in the section titled 'Culture Shock.'

One insidious characteristic of such misunderstandings is that, particularly if the elective is short, the student may never even realize that misunderstanding occurred. A second difficulty is that, once the student is home, the misunderstanding in a far away land may seem irrelevant and not worthy of further thought. That not only may leave pain unattended; it may prevent the student from learning or from gaining insight.

In such cases, a relationship with a host who is willing to work with the student, explain local norms and expectations, and explain and mediate misunderstandings, is of *enormous* benefit. The value of such a host is great even when sailing is smooth; when the course becomes rough, it is invaluable.

PROTECTION OF THE STUDENT'S OWN HEALTH

It often seems that students are cautious in the beginning, but start to abandon caution as they feel more familiar with the environment. Very often, a going away party at the end of the experience seems to be the culprit. Knowing a return home is imminent, a student may throw caution to the winds and sample foods, beverages, or experiences that have been avoided until then.

Many causes of health problems are obvious and avoidable. To work in a tropical setting with an open skin lesion is an invitation for trouble. The combination of sunburn, dehydration, overexertion, stress, and jet lag may produce an initial run-down state from which a student never seems to recover. And a point made earlier in this section must be stressed again. Many problems are caused by an attempt to live one's familiar, US lifestyle, in a setting where it is neither feasible nor appropriate. Many problems may be avoided by watching how things are done locally and trying to learn why they are done that way.

Students may not consider the possibility of traffic accidents in a developing nation where there are no freeways or rush-hour traffic, yet in many settings they are not only common but predictable—from local statistics, from the condition of roads or vehicles, from the way people drive. It is unwise to assume that all drivers “know what they are doing” or to ride along in a situation which is overtly dangerous!

How does one avoid a dangerous situation (such as riding with a driver who seems unsafe) without offending others? *Doing something one considers dangerous is not polite or culturally sensitive.* On the contrary, when one agrees to do something, this may lead to expectations that one wishes to continue to do it, and hence promotes misunderstanding. In general, tact is less a question of what one does, than on how one does it or refuses to do it.

Emotional distress, like medical illness, may sometimes be anticipated. Some of the reasons it occurs have already been discussed. These include culture shock and the fact that friends, family, and almost everything which is familiar lie far away; misunderstandings; the monotony of environment and climate in some settings; jet lag, exhaustion and a changed schedule and lifestyle.

There are also unfamiliar stresses, such as seeing children die of easily preventable disease, or the necessity of endorsing customs, such as bribery or the hiring of servants, which one was raised to believe are wrong, or trying to carry out a project which proves impossible.

WHAT IF THE PROJECT PROVES IMPOSSIBLE TO CARRY OUT?

A student may arrive only to discover that an intended project simply cannot be done. This may be due to local resources, local politics, or just because the project was not thought out completely enough. A second, fallback project may prove no more feasible than the first.

In this case, the student might sit down with the local sponsor(s) and re-explore what is feasible and desirable from a local standpoint. This is what should have happened in the first place! In such a case, much, if not all, of the available time may be spent simply negotiating a new and more feasible project. Such an experience may be more valuable than it would have been to carry out an ill-conceived but predetermined project on schedule! Advisors are encouraged to view such a change of plans as positive and constructive rather than as failure.

DEALING WITH DISTRACTIONS

Almost certainly, a student who arrives in a new setting will find a number of unanticipated pleasures and distractions in competition for his or her time. Some of these may hold the promise of being more rewarding, or educational, or interesting, than the project the student has come to do. Some may be in the form of interpersonal relationships which the student would like to nurture. Others may be unanticipated clinical or educational opportunities which seem too valuable to pass up.

Distractions are most likely to become a problem when the student hasn't planned for the possibility. One benefit of an unscheduled period of orientation time at the beginning of an international elective is that it allows the student to identify possible distractions early and begin planning around them. It is also valuable to plan some free time *after* the elective as well, so the student does not feel compelled to indulge every distraction during the body of the elective.

The student should be encouraged to consider possible distractions ahead of time, and how these might be handled. These are beyond the scope of this section since they will vary widely from person to person and between settings.

THE VALUE OF A DAILY JOURNAL

During the elective itself, the idea of keeping a journal may hold little attraction. To keep a journal takes time each day, and the student may believe that these fresh, intense experiences will be easy to remember.

Yet two weeks after returning home, that student will find that many details have already been forgotten: exactly what circumstances led to what, or why something couldn't be done the way it was planned, or the address of a person with whom the student promised to keep in touch. Regardless of how the experience went, also, it is helpful to have actual facts, and not just memories, in recreating and understanding all that happened. At this point, a journal becomes invaluable. Yet experience has shown that one *must* keep a journal day to day—it can't be done afterwards. Each day erases, distorts, or confuses some memories from the previous one.

Michael Winkelman⁸, an anthropologist who operates a “field school” in anthropology each summer in Mexico, suggests that students should ideally keep *four* logs. One is the student's working set of “field notes” scribbled out each day as one works. The second is a formal “journal,” which is based on, and expands on, the information from the field notes. The third is a “plan book” which records the overall schedule, plan and rationale of the project as one *intended* to carry it out. (This is useful because often what happens has little resemblance to the plan—and then it is hard to reconstruct, later on, why things were done as they were.) And the fourth is a personal diary, which is private.

⁸Michael Winkelman, PhD, is with the Department of Anthropology, Arizona State University, Tempe, Ariz 85287.

ONCE THE STUDENT IS ACTUALLY ON-SITE

The advisor's role does not end as soon as the student has actually reached the elective site. There are three primary roles the advisor may play while the student is away:

- 1) Test communication lines with the student by relaying at least one message early on which requires a reply. (This may be uplifting to the student as well.) The first day on-site may be difficult and lonely for the student and it can be reassuring to know that one is not out of touch. If it proves difficult or impossible to contact the student, help to develop an alternative means of keeping in contact.
- 2) Get in contact with the on site supervisor, review the progress of the elective with this person while it is still taking place, and remain readily accessible should contingencies arise.
- 3) Be prepared to address any of the topics in this section of the manual. Although they may have been reviewed with the student beforehand, they take on new urgency once the student is actually there.

FOURTH CHECKLIST: AFTER THE RETURN HOME

- ANTICIPATE A LETDOWN
- REVERSE CULTURE SHOCK
- HONORING COMMITMENTS
- COMPLETION OF COURSES OF MEDICATION
- OBLIGATIONS TO SUPPORTERS OR SPONSORS
- PREPARING A REPORT
- SHARING THE EXPERIENCE—WATCH OUT FOR:
 - SENSATIONALIZING
 - GENERALIZING
 - DIVULGING CONFIDENTIAL INFORMATION
 - GIVING TOO MUCH ADVICE

FOURTH CHECKLIST: AFTER THE STUDENT RETURNS HOME

ANTICIPATE A LETDOWN

As a result, right after a stimulating, self-directed, creative experience abroad, the student is plugged bluntly into a hard schedule back home, which seems to lack all of these characteristics, among people who seem uninterested in the profound life experience the student has just had. There may even be overt misunderstanding as to why the student went. Having gone to all of the effort to develop and carry out an imaginative international project, the student may be criticized as not wanting to practice real medicine, or as unmotivated to study, or as “vacation happy.” In fact, these reactions happen so often that a student may almost anticipate them.

Any experience as intense, personal, and unique as an international rotation is likely to result in a significant feeling of loss when it ends. There is also a loss of new friends and companions in a very intense experience. From a setting where every experience was new and different, the student returns to one which seems unexciting due to its familiarity.

The letdown may be further amplified by things which happen back home. Sometimes a brief presentation is made, to a few faculty or students, and that is the end of the experience. In some cases, the audience isn't interested; sometimes colleagues turn out to be envious rather than accepting. Or sometimes the student's written report is discovered to have been simply filed away, unopened. There may be a sentiment that the student “has been away too long” and had better get back to work, perhaps even more intensely than s/he would otherwise have been expected to do. Piles of work may also have accumulated while the student was away.

Such reactions would be trying even to a student who is still buoyant from the experience. Unfortunately, however, recently returned students are often in the midst of a unique sort of grief reaction known as reverse culture shock.

REVERSE CULTURE SHOCK

Although culture shock is a well known, and sometimes misunderstood, phenomenon, many students do not realize that the reverse culture shock which takes place when one returns home may be just as profound. Particularly if one has been away for a while and has learned new rules of behavior, seemingly familiar ways of doing things now look strange. Students comment on noise, the constant rush people are in, and the seeming waste of everything which they find back at home. In many parts of the world, shopping is a very social activity. After shopping in foreign markets, where the simple purchase of a potato may be accompanied by much talk, bargaining, and leisurely enjoyment, a United States supermarket seems cold, impersonal, and rushed. Traffic is frightening and the need to resume a rigid schedule may seem overwhelming. It is impossible to convey, to someone who has not experienced it, the profundity of this discomfort.

While culture shock is an anticipated part of the process of travel, reverse culture shock is an often unexpected blow, a reminder that the adventure is over and that nothing back home is as one thought it was. Moreover, the process of reverse culture shock may persist for a long time, and is intensified by the fact that people back home seem unaware of the feelings the student is experiencing.

Students have described, after being away only three months, that they find themselves bewildered at the variety of items on the menu of a typical United States restaurant. More foods may be listed at a typical fast food restaurant than were available in an entire country. Or they comment on the strange sensation of having a flush toilet all to themselves; or of throwing away something that has been used once. Familiar customs, such as tipping, now look different when one has become accustomed to bribery and barter; and one becomes aware of such interpersonal issues as how far to stand from another person, and how intensely one is looking into someone else's eyes while talking. One may even "miss" the wolf whistles, stares, or physical contact which had been an accustomed part of going out in public.

For a member of the medical profession, the experience may be even more profound; for medicine in the United States represents a fairly rigid culture with firmly held beliefs and rules for behavior, which may seem to have little to do with what the student has just experienced abroad. In addition, after having worked in settings of intense medical need, the complaints and resources seen in United States hospitals may seem inappropriate. Students typically express frustration at dealing with seemingly trivial 'suburban' complaints such as colds, nervousness and headaches (sometimes managed with CT scans and hospitalization) when they have just seen people dying of pneumonia, dehydration and starvation in that could have been easily treated had the most minimal resources been available. The unique character of "reverse culture shock" among medical people has yet to be fully explored; but physicians who have worked abroad often say that they do not practice quite the same way afterward, although they may find it difficult to explain how.

In many cases, students realize, after the fact, that they would not have had to go to another country in order to gain the changed perceptions they now have. An equally profound experience might have been obtained in their own city, had they known how to look for it. With this new awareness, which is also difficult to describe, they may now seek out experiences within their communities where these new perceptions may be tested and applied.

One of the greatest difficulties in reentry can be the impossibility of explaining to another person, what one has experienced. This is because, in many ways, the changes which international experience produces, take place within oneself. If one has actually lived in a squatters' colony, the term takes on a new meaning it is impossible to convey. One may try, by describing that there was no water, no electricity, and no sewage system; but that sounds trite until one has experienced it. Likewise, the monotony of life in a tropical village, the pervasiveness of bribery, the difficulty of achieving sanitation or simple first aid, may be described but not understandable once one is back home.

HONORING COMMITMENTS

Failure to follow up on commitments that were made while abroad is a common problem. When one is a guest in another community, it is easy to make promises involving a lasting relationship, sending of needed supplies, or future visits or exchanges. Once one is back home, such promises may quickly fade. Sometimes this is inadvertent: luggage gets lost, notes to oneself are accidentally discarded, new obligations intrude. Sometimes it is part of reverse culture shock: in the intensity of shifting gears and of adjusting once again to daily life, those promises are relegated to the back of one's mind. And sometimes, promises were made which simply prove too difficult to keep.

Unfortunately, people in the host country may not understand. The student had been welcomed, resources have been expended—and there is an expectation that the student will, in turn, then keep agreements which were made. Often people are really depending upon those agreements, just as the student, before departure, depended on the people who would be serving as hosts. There is probably no such thing as a visit to another country where absolutely nothing is expected or hoped for in return.

The student should make every effort to honor agreements which were made, even though there may be no secondary gain and there may seem nothing to lose for that particular student if they aren't honored. *Future students* will lose, as will the host community. If promises cannot be kept, hopefully other arrangements, acceptable to all parties, can be achieved. Ideally, of course, unrealistic promises should not be made in the first place.

The breaking of promises is even more likely if the international experience was not entirely satisfactory. If, for cultural or other reasons, misunderstandings have occurred, or if the student has experienced personal illness or injury, s/he may feel no further obligation to the hosts. However, those hosts may not see it the same way (in fact, their costs may even have been greater in such circumstances,) and in such cases, too, an outcome should ideally be negotiated which is acceptable to all parties.

COMPLETION OF COURSES OF MEDICATION

One form of 'failure to follow up' about which advisors may not think to inquire is the **failure to finish out a course of medications** or treatment which were prescribed with relation to the visit. A common example is chloroquine, which typically is to be continued for a period of time after the student's return. Once one is back home, the risk of malaria may seem slight. How often the course of medication is actually completed is interesting to speculate, but an advisor should, among other things, see to it that such courses of medication are carried to completion. In this circumstance the advisor is in effect cast as the student's "doctor" for perhaps the only time in their relationship; hopefully the role can be played effectively.

OBLIGATIONS TO SUPPORTERS OR SPONSORS

Repayment of obligations to those who have provided moral, logistic, or financial support toward the elective, after the experience is over, may seem to some students to be of dubious present or future benefit.

In rare cases, a student learns something about a sponsor, perhaps while abroad, which leads to a wish to sever the relationship with that organization. Not every sponsor of international experiences is necessarily benevolent or altruistic! Many sponsors, moral or financial, expect secondary gain from their role, a gain which in the initial flush of enthusiasm before the experience, a student may not have perceived. A change of perspective, however, should *not* let a student off the hook in terms of repaying obligations; although ideally, under such circumstances the student will not seek support from that sponsor again.

PREPARING A REPORT

A frequent (and probably reasonable) expectation is that any student who takes part in an international experience will write it up in such a way that the information is useful for others who might want to follow. Such an account may include information corresponding to many of the chapters of this manual: preliminary arrangements, special requirements, immunizations, people to contact, and so on.

Often it is very helpful to have simple, mechanical description of how things work in the setting the student visited: how to get laundry done, use the telephone, get from one place to another, where to eat, who is who and so on. In addition, a student can share retrospective wisdom: what parts of the student's plans or project went well? What could be done better next time knowing what the student now knows? What should not be attempted?

This kind of description is difficult to write more than a few months after the experience. On the other hand, the passage of time may be required for the student to "make sense" of the experience to a point where it is possible to share what one has learned. This is true even if the experience was positive. If it was not positive, a great deal of introspection, rationalization, and coming to grips with what happened may be required. That may be necessary, for example, when a student has worked in a setting in which children were dying and where it seemed beyond the student's power to impact on this.

Partly for this reason, a final written report on the experience should usually not be demanded too soon. On the other hand, factual details will be freshest and most complete if the report is written shortly after the experience. This dilemma may be resolved if the student has kept a journal each day during the elective, so that details are preserved. The availability of a journal means that students may then wait until they have had time to do some thinking before they write a final report, while assuring that details will not be lost.

SHARING THE EXPERIENCE

In most cases, (and unless a public journal has been kept,) no one can verify the student's information or reported experiences, so there is no reality check on student's descriptions of what they saw and learned. With time, and perhaps after some fantasizing and exaggeration, the student may begin to recall events differently than they happened. The results may include:

SENSATIONALIZING

Because the experience may have been intense, stimulating, and sometimes exotic for the student, there is a tendency to present it that way—and objectivity may suffer as a result. This tendency may be reinforced by the fact that the international experience can be a good topic for conversation at dinner or parties, and the more exciting the story, the more interest it generates. It is also reinforced by the fact that a student is more likely to notice unusual elements in an international experience, than familiar or mundane elements, so even if the latter predominated in reality, the former are more evident in the stories which are told.

Faculty may inadvertently reinforce such behavior, partly because they want to know exactly why the student had to go to another country and what was learned which was so different; this reinforces the student's tendency to notice and stress differences, and unusual elements, rather than to report with perfect objectivity.

GENERALIZING

To assume that an experience in one city, country, or hospital generalizes to others is not valid within the United States. It is not likely to be true on a student's elective abroad.

One interesting lesson taught by the cross-cultural simulation game *Bafa-Bafa*¹¹ is that limited exposure to another cultural group may lead to *misunderstanding* rather than increased tolerance and sympathy. This is always a danger, particularly in short experiences during which a student is exposed to small numbers of people and experiences, yet is expected to draw meaning from the experience. This danger, and its symptoms, may affect not only the student, but any audience to which s/he speaks, particularly if the student has had an interesting experience and is frequently asked to focus on the more exotic or unusual aspects of it for an audience.

¹¹ Copyright Simile 11, 218 Twelfth Street, PO Box 910, Del Mar, CA 92014.

DIVULGING CONFIDENTIAL INFORMATION

A third potential problem is the revealing of confidential information. This is particularly easy to do when the people concerned are far away, the things to be divulged seem so interesting, and no one in the audience is likely to ever meet the people in question anyway.

One form in which the problem of confidentiality accidentally manifests is in the showing of photographs of people who were seen as patients. One could not necessarily do this with United States patients, but little thought is given to the use of photographs from faraway settings.

The question of what is confidential is not easily answered in cross—cultural settings. In some South-east Asian communities, for example, people may freely discuss information among themselves which the community, as a whole, will not divulge to outsiders. Thus, information is simultaneously very public and yet very private from a United States perspective.

Questions of international law are also sometimes involved when photographs or information are shared. If there are political tensions (or ones related to drug traffic, clandestine operations, etc..) a seemingly innocent photograph, comment, or quote may have significant implications for someone back in the host country.

There are two problems when such information is divulged. First, there is no form of reality check concerning what is divulged, since the people being discussed are not there to defend themselves. And second, a student is rarely in a position to have been a truly objective observer or to understand the reasons for, or ramifications or culture-specific meanings of, the information being divulged. This whole issue involves questions of cultural sensitivity which are not easily mastered.

GIVING TOO MUCH ADVICE

A final pitfall to caution students about is that of **giving too much advice** to the next person. There is a natural tendency, when one has had an intense experience, to advise those who will follow. Such advice, however, is fraught with all of the dangers which have already been described. The problems in such advice are clearly illustrated in the previously mentioned game Bafa-Bafa. One lesson which emerges from this game is that efforts to explain what one has seen, after limited exposure to another culture, may only increase, rather than lessen, misunderstanding.

This is a powerful message for students to bear in mind. Each person's experience is, and must remain, to some degree unique and personal. This is, in the end, the reason for each student—not just one, or a few, in each group—to seek international experience in the first place.

IS THERE A NEED FOR A NEW “INTERNATIONAL HEALTH” MAGAZINE TO ALLOW SHARING OF STUDENT EXPERIENCES?

Although many student reports would be valuable to other students and faculty, there are few outlets, at present, for actually publishing or widely disseminating them. Most reports of international experiences, which tend not to be strongly research-based, do not meet conventional standards for publishability in major journals.

On the other hand, in many instances—particularly if a site is rarely visited or rapidly changing—such reports represent the only information we have and do represent the current state of the art. A group within the STFM International Committee is considering the idea of publishing an “International Health Working Papers” to disseminate such reports by students and faculty.

The feedback of readers of this manual, concerning this question, would be greatly appreciated. We would be particularly interested to know: the level of interest among readers; the availability of well-written reports for inclusion in this journal; and the names of individuals willing to serve as editors or reviewers of such a journal.

LOOKING BACK ON THE EXPERIENCE: STUDENTS' RETROSPECTIVE IMPRESSIONS FROM ELECTIVES IN DEVELOPING COUNTRIES

by R. Bissonnette and C. Alvarez¹²

The previous sections of this manual sound a rather cautionary note concerning international experiences. This was done in part to stress potential adverse impacts which may result from a lack of careful planning. It is not meant to imply that an international elective is not worth the effort. Students who have participated in well planned and supervised experiences describe a wealth of new perceptions which are uniquely attributable to international or cross-cultural work. In this final chapter, Drs. Bissonnette and Alvarez discuss some of the observations their own students have described.

For at least 40 years, US medical schools have conducted formal electives in developing countries. Though little systematic documentation of the educational consequences of international experiences is available, what data we have suggest that these electives have powerful salutary effects on the personal and professional growth of the participants.¹³

In 1984 the Department of Family Medicine at SUNY Buffalo began a program of clinical electives in developing countries. Concurrent with these electives, we collected feedback from students in order to try to identify, in a systematic fashion, the clinically significant features of culture in health and medical care as those students had interpreted them.

To date, responses from 30 students, mainly seniors, have been obtained. They represent clinical electives in various developing countries from 1984 to the present. Typical electives were in relatively spartan sites but under supervision of Western trained, and usually American, primary care physicians.

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¹³Asper, SP, and Steel, WW, eds. 1988 International Programs and Projects, PA Educational Commission for Foreign Medical Graduates, 1988.

Among the most frequently used sites in this program were: Tumu Tumu and Kikuyu hospitals in Kenya; Emkhuzweni Health Centre and Raleigh-Fitkin Hospital in Swaziland; and the refugee camps on the Thailand-Cambodia border. Electives were normally six to eight weeks in duration and required a combination of inpatient and ambulatory service.

Rather than use a formal definition of culture, we instead have identified those categories most frequently used by students in describing the influence of culture on presentation, course, and management of illness. These are:

- language and communication
- religious beliefs
- marriage, family, and sexual relations
- psychosocial issues
- disease concepts
- death/ dying

Language and Communication Although English was the official language in many areas, especially Africa, tribal languages and regional dialects complicated communication between students and patients. Typically interpretation was available through a nurse or aide, but direct, easy dialogue was rare. This communication barrier exaggerated other difficulties characteristic of clinical medicine in some countries—patient passivity and lack of trust. Although the importance of doctor-patient communication had been emphasized to our students, their actual experience seemed to offer little basis for operationalizing that advice.

With heightened consumer sophistication has come a growing appreciation for a collaborative relationship between patient and physician. Contributing to this in Western society has been the increasing proportion of chronic problems and the recognition of the vital role of behavior in health and illness. Yet the notion of “doctor’s orders” and the one-way communication implicit in that notion remains deeply imbedded in our culture¹² and virtually unchanged in many rural and urban populations typically neglected by the health care system. Upper middle class medical students in urban training environments tend not to see the clinical consequences of unilateral communication for several reasons:

- among more sophisticated patients it is relatively subtle;
- their relationship with less sophisticated urban and rural patients is often limited in scope and episodic in nature; and
- their truncated involvement with patients in general obscures even the short-term effects of unilateral communication.

In Third World settings consequences were obvious and often dramatic. Students readily saw in extreme degree a problem they tended to ignore in their home environment. Communication barriers due to differences both in formal language and in world view effectively prevented enlistment of the patient as an equal or even junior partner in treatment or health maintenance. By witnessing first hand the heightened effects of one-way communication, students were truly impressed with the critical importance of doctor-patient communication. No longer was it one of those ‘soft’ issues easily forgotten in day-to-day practice. One student commented: “the Third World would be where a health partnership could be beneficial—prevention of disease is far less expensive than cures. This is one view I will likely maintain in the States.”

¹²Bissonette, R, and Seller, R. Medical Noncompliance: A Cultural Perspective. *Man and Medicine* 5, 1 (November 1980): 41-53.

The virtual impossibility of achieving real rapport when working through an interpreter did little to establish a bond of confidence. The resultant doctor-shopping (which included native healers) frustrated students, but also taught them in the hard currency of serious illness and death the clinical importance of rapport and trust.

Religious Beliefs. The examples of health-relevant differences in religious beliefs are protean but the consequences fall mainly into two categories—late and too late presentation of illness.

Religious and magical belief systems which excluded biomedical concepts of disease placed native healers or shamans on the first line of intervention. Students witnessed the results when desperate patients appeared so late that medical intervention was difficult or impossible. Despite their frustration, students recognized these behaviors as a result of a truly different belief system rather than as stupidity or culpable ignorance. Fatalism, often encountered in cultures influenced strongly by Islamic religion, had similar consequences.

Numerous specific beliefs were equally instructive and frustrating. Students reported situations in which a bulging fontane was regarded as an open mole and a sign of evil spirit possession. One medical consequence of traditional treatment—in which the area was shaved and rubbed with chalk—was a presentation with late-stage meningitis.

In sections of north-central Tanzania, tradition blames flies for a variety of internal disorders. Flies might gain entry into the body through ingestion, aspiration or the curse of an enemy. The remedy is ingestion and subsequent regurgitation of a milky liquid from which the healer will invariably retrieve the offending insect.

Due to the striking contrast of these beliefs with their own, students could recognize them as legitimate cultural variations with major implications for health and health care. Less extreme but similar differences lacking that contextual validation are typically attributed in one’s home setting to ignorance or stupidity and dismissed by the physician with a fatalism as dangerous as any to be found in another culture.

Marriage, Family, and Sexual Relations Within this broad category, several beliefs and practices repeatedly made an impression upon students in African countries.

For men, out-of-wedlock sex with multiple partners is permitted and encouraged by tribal traditions. The health consequences are amplified by mobility and urbanization in present-day Africa and include extensive sexually transmitted disease and spontaneous abortions. Even the introduction of readily available treatment for women has little impact, since they may be repeatedly re-infected by men.

Polygamy, usually polygyny, is widely accepted but is practiced by a minority of the population in virtually any society. For most men a second wife is a costly and complicated luxury. This is especially true as cash-crop farming and urban employment replace subsistence farming. The latter was more facilitative of a polygamous family structure, and yet even under those conditions polygamy was largely limited to wealthy tribesmen.

Compounding these effects is the traditional definition of a woman's role. In addition to maintaining the home, and often the farm as well, she is expected to bear children continuously throughout her reproductive years. Despite changing conditions in which large families are seldom an economic asset, the fecund woman is still highly valued as are large families. Multiparity appears to be associated with high levels of maternal and infant mortality and morbidity.

Male dominance and sex role rigidity have additional health consequences unfamiliar to students. Healthy fathers with malnourished wives and children were common. In the house, men ate first and wives and children ate what remained. Where the supply and variety of food were limited, students repeatedly encountered malnutrition caused by structural, environmental, and domestic factors compounded by cultural norms.

Sex roles raised other issues when hospitalization of the mother was concerned. Husbands often resisted or refused hospitalization of the mother or wanted her to care for the children while hospitalized. Even when this was not possible, the pressure on the wife to return to her domestic responsibilities was intense, often resulting in premature discharge. Despite the harshness of these behaviors, a salutary lesson for the students was recognizing, albeit in exaggerated form, the importance of negotiating rather than writing orders.

In societies where formal support systems are minimal, the role of the family in illness may be badly underscored. Students were often startled to see families move into the hospital with patients. This was often the only way adequate feeding and maintenance could be accomplished; and this realization sensitized students to the broader impact of familial support on treatment outcome. Students quickly came to appreciate the minimal effect of medical intervention in the absence of family support.

Barring acute emergencies (by their definition,) care was neither sought nor expected by mothers caring for very young children nor during harvest time. Competing demand for domestic order and sometimes survival deferred medical attention. Familial constraints, like family support, cannot be ignored if medical intervention is to be effective. That such factors may represent life and death issues, which *must* be respected by the physician, is a powerful lesson.

Psychosocial Issues Popular stereotypes include images of individuals in the Third World as poor but carefree. Returning tourists who pass through in air-conditioned vans reinforce this stereotype through references to the quaint and sometimes inconvenient nonchalance of the natives. Distorted depictions a la Paul Gauguin of pre-Western societies as simple paradises of man in the lap of a bounteous nature date back to the earliest European explorers.

In reality, the Hobbesian description of existence in the state of nature as "nasty, brutish, and short"¹³ is a far more accurate rendering of life in developing countries. The seeming indifference to time, planning ahead, etc., is one reflection of an existence where control of one's destiny is minimal. Under such conditions, living for the moment is an entirely rational accommodation.

Stoicism is a consistent response to deprivation and suffering but created difficulties for medical students faced with late-stage presentations with preventable complications. Although frustrated by this, students often came to recognize it as a legitimate and appropriate cultural pattern.

¹³Hobbes, T. *Leviathan*, Part I. Chapter 13 London: Rutledge, 1651.

Stress, therefore, is ubiquitous but with a different fundament. Where we worry about success and self-actualization, the native African is concerned about survival. Manifestations of such stress, and student perceptions of it, took several forms:

Stress-related psychosocial problems were extensive but frequently ignored or downplayed by both patients and students. In large measure this was due to overwhelming pressures of acute life-threatening problems which absorbed available time and resources. At the same time, it reflected resignation to the near absence of intervention tools in the community clinic. Students learned to view the interventions of a native healer or shaman, under such circumstances as often quite effective. Through ceremonial ministrations, a shaman could give the problem a name, a cause, and a validity; enable the patient to express distress; mobilize family and community support; and restore hope. These are universal elements in effective psychotherapy.¹⁴

Absence of overt physical signs and symptoms were typically equated by patients with nonmedical problems. Students readily saw the parallel of this perception with prevailing beliefs shared by patients and physicians in Western society.

Mental illness and retardation which had no obvious physical manifestation and were not curable by the shaman were often stigmatized. Adults and children with such conditions were at best tolerated, at worst shunned and left to fend for themselves. Frequently, those who survived did so by living on the streets as beggars. Students came to recognize that unproductive children and adults might be perceived as a real threat to survival of the community in an economically precarious setting. Indeed, some students found this harshness more understandable than the plight of street people in the United States where resources, by comparison, are enormous. A related, clinically significant lesson was the realization of the enormous demands on family emotional and material resources resulting from disabilities which are disabling but not fully accepted as legitimate illness.

Finally, students observed in comparative extremes what is common but more subtle in Western medicine—that nonphysical problems were not considered the province of the physician. Hence, many psychosocial problems were presented as physical complaints to legitimize them. Students not only recognized the diagnostic and management difficulties posed by this practice but learned, as well, that such behaviors were not simply attributable to ignorance or misperception.

¹⁴Frank, J. Psychotherapy: The Restoration of Morale *Am J Psychiatry* 131 (March 1974): 271- 274.

Concepts of Disease The apparently irrational behavior of natives in ignoring symptoms, reinfecting themselves or others, failing to follow prescribed treatment, and avoiding treatment altogether is often explainable in terms of a concept of illness different from the biomedical model. As one student returning from Africa put it, “the ... lack of the ‘germ theory’ was a deterrent to treatment and prevention. They could never get too excited about flies.” From the perspective of one relatively sophisticated medical student, the attribution of illness to sorcery or to supernatural forces reflected dangerous ignorance, but nonetheless commanded sufficient respect in the foreign context to warrant attention rather than impatient dismissal.

Death and Dying Students and clinicians were frustrated by “unnecessary” death due to lack of equipment and treatment options. Yet the ubiquity of death in the experience of all age groups gave rise to some instructive responses by patients and families. Death was typically not discussed in cases of terminal illness nor was it brought up by doctors or patients in hospitals. On its face, this appeared to be a form of denial but societal and familial response suggested otherwise. Although preparation for death through frank discussion—the current fashion in our culture—was conspicuously absent, patients seemed to accept death with resignation, if not serenity. For family and patient, death was a commonplace experience and was handled with dignity. Typically the patient, especially if elderly, died at home cared for by family members. The absence of “therapeutic” discussions with media personnel was probably due to the prevailing definition of death as a normal event in everyday living. It was a family affair where healers were often irrelevant.

CONCLUSIONS

Although the literature is mainly anecdotal, it does tend to confirm generally beneficial training effects in several specific areas of knowledge, skill, and attitude. These areas include:

1. improved confidence in one’s fund of knowledge, history, and physical exam as the principal basis for diagnosis and treatment plan;
2. improved skills in the diagnosis of undifferentiated presenting complaints;
3. greater appreciation for the health consequences of economic and political policy;
4. enhanced sensitizes to cost factors; and
5. a greatly enriched cognizance and respect for the clinical significance of culture in the presentation, diagnosis, course, consequences, and management of illness.^{17,18,19,20}

Cultural sensitivity is gaining respectability as an essential rather than a merely desirable training goal.²¹ This new respectability seems to have emerged from major demographic and political shifts²² which have forced educators to acknowledge a reality which is new only in scale.

¹⁷Bowdler, AJ, and Wallace, N. The Role of Overseas Experience in the Education of Medical Students, *J Med Ed* 49 (November 1974): 1035-1039.

¹⁸Gorton, MM. Hospital Practice in Nepal. *N Engl J Med* 312 (April 1985):249-250.

¹⁹Barry, M, and Bia, F. Medical Rotations in Third World Settings, (Letter) *N Engl J Med* 313 (July 1985): 122.

²⁰Taylor, CE, et al, US Medical Students in Nepal. *J Med Ed* 53 (July 1978): 583-589.

²¹Diehl, AK. The Melting Pot: Examine Before Stirring. *J Gen Intern Med* 3 (Jan/Feb 1988): 90-9.

²²Hispanic Americans: An Emerging Group. *Statistical Bulletin* December 1988, pp. 2-7.

Certainly the clinical significance of cultural factors in medicine has been professed for many years by a vocal minority of medical educators.²¹ In American medicine one may find the seeds of this conviction as far back as William Osier’s exhortation, “it is not only book knowledge and journal knowledge, but a knowledge of men that is needed. The student will, if possible, see men in other lands.”²² Medical student and faculty reluctance to embrace a murky notion such as culture is not surprising. Its clinical relevance is not immediately evident and it is generally perceived as falling into a “nice-to-know” rather than “need-to-know” category.

Nonetheless, seasoned practitioners continually warn that we ignore cultural issues at our peril. The way a culture conceptualizes illness and the behavior it prescribes for curing or preventing it must be taken into account if ever what medicine has to offer is to be effective.²³ Exposure to other cultures may improve our tolerance of different ways of life,²⁴ provide “deepened insights”²⁵ and place effective patient care in the total context of culture and beliefs.²⁶ Concrete clues to the clinical relevance of cultural sensitivity emerge in the observations of scholars working at the interface of medicine and the behavioral sciences. Bart,²⁷ for example, has identified ways in which special ethnic and cultural qualities influence the language used to describe complaints and how physician response is influenced by

these “vocabularies of complaint.” Still, demonstration of clinical relevance requires far more specificity if it is to engage students and practitioners pressed by competing demands on their time and energy.

²¹ Hardwood, A, ed. *Ethnicity and Medical Care*, Cambridge, Massachusetts: Harvard University Press, 1981.

²² Osler, W., *Selected Writings of Sir William Osler*. New York: Oxford University Press, 1951, p. 174.

²³ Eisenberg, L. *Social Science in Medicine: Too Much or Too Little and Too Limited Scope*. White, Kerr, *The Task of Medicine: Dialogue at Wickenburg*. Menlo Park, California: Kaiser Family Foundation 1988, pp. 192-217.

²⁴ Adams, ACI. *Teaching International Community Medicine*. *Arch Environ Health* 10 (October 1965): 95-103.

²⁵ Taylor, op. cit.

²⁶ Collick, IL. *The American Medical Student as the ‘Grass Roots’ of Depressed Cultures: A Contribution to International Understanding* *J Med Ed* 36 (July 1961): 812-822.

²⁷ Bart, P. *Social Structure and Vocabularies of Discomfort: Whatever Happened to Female Hysteria?* *J Health Soc Behav* 9:88 (September 1968).

That culture is a factor in the nature, cause, presentation, management, and course of disease is a widely affirmed belief. Application of that belief to teaching and practice remains an elusive goal in the absence of documented specifics on one level and the very capacity to recognize cultural factors on another.

Students and physicians working in their home environment will frequently encounter members of subcultures whose traditions and beliefs are at variance with the values of practitioners in general and the biomedical model of illness in particular. Typically, these differences are attributed to ignorance which is to be overcome or else dismissed as a nuisance.

As a sojourner in another culture, the student is the minority and the belief systems are more disparate. Here the tendency is for students to recognize differing world views as legitimate, albeit technically incorrect. This attitude is conducive to efforts to accommodate the differences and often use them to therapeutic advantage. Despite obvious frustrations, this approach is far more productive than the cultural evangelism unwittingly practiced by physicians serving minorities in this country. Student reports clearly suggest a softening of this wasteful confrontational attitude as a direct result of their cross-cultural electives.

Responses from returning students clearly indicate an appreciation for cultural sensitivity as tantamount to traditional competencies (history-taking, physical exam, fund of knowledge) in the clinician’s repertoire. This appreciation is a direct consequence of working in an environment in which the biomedical paradigm is a minority viewpoint. As seen by students themselves, the components of culture in which clinical relevance was most clearly apparent were: language, religious beliefs, marriage, family, and sexual relationships, psychosocial issues, disease concepts, and death and dying. The derived clinical issues such as prevention, doctor-patient communication, family focus, and community orientation were thrown into sharp relief and ceased to be viewed as largely irrelevant “soft” notions.

One cannot leave this subject without addressing the inevitable question. *Why it is necessary to traverse the planet* to find an educationally valuable cross-cultural experience? Certainly such lessons are available within a mile or two of almost any medical school; but the reality is that students will travel to Africa for adventure and to get an education, while they are far less likely to travel across town for either. Although it is not the responsibility of medical educators to accommodate those inclinations, we can take advantage of those that exist if appropriate and if they contribute to the benefit of student and patient.

Students will, as they have for at least half a century, continue to study in developing countries. We can optimize the value of these experiences by knowing specifically what they comprise and what yield may be expected for all parties. From this may follow a more rational approach to screening, preparation, and evaluation of students; and on a broader level, such electives may become an integral component of curriculum rather than training exotica.