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READING PROGRAM FOR THE THIRD YEAR MEDICAL UNDERGRADUATES

by

Gabriela Breazu

B.A. Universitatea Babes- Bolyai 1975

Cluj-Napoca, Romania

Submitted in partial fulfillment of the requirements for the

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ABSTRACT

This paper provides an examination of the reading program that was devised for the third year medical undergraduates, at the Department of Modern Languages, at the University of Medicine and Pharmacy "Iuliu Hatieganu", Cluj-Napoca, Romania.

The reading program, using authentic medical texts and authentic literary texts, is intended for Romanian medical students in order to develop efficient reading skills. At the same time the program aims at pushing learners into experiencing pleasure and joy in reading interactively, inside and outside the English class and classroom.

The chapters of the paper analyze in details the different parts of the program from the teacher's perspective as an observer of the program, which was partially piloted during the previous academic year. Moreover the paper gives the criteria used in the selection of the texts. The paper presents the implementation of the Reader Response Theory, using medical and literary texts within the English (EFL) classes for the same group of Romanian students. Furthermore it gives details on the attempt at improving reading speed within the learning/teaching process. The presentation of the Self-Access Center implemented at the department is also dealt with within the present paper.

The results are substantiated by classroom observation.

ERIC Descriptors:

Reading Skills Reading Comprehension Teachers

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INTRODUCTION

The paper is an attempt at describing a reading program for developing efficient reading skills for the third year medical undergraduates devised at the Department of Modern Languages of the University of Medicine and Pharmacy, Cluj-Napoca, Romania. The program is actually the result of my professional search for finding my own WAY in teaching. The experiential WAY that I first encountered within the Summer Master of Arts in Teaching Program that I was part of as a SMAT 17 at the School for International Training (SIT), Brattleboro, Vermont, USA is still with me and can easily be detected in this reading program as well. In order to answer the question why such a program is needed for the Romanian medical students, I will try to give some of the reasons below.

Romanian medical students need extremely efficient reading skills as they are supposed to communicate with peer students but also later on with peer doctors, i.e. to decode any message at a satisfactory level. They need such a program as the one presented in this paper in order for their reading skills to be developed in a more systematic way.

For non-native English students it is of utmost importance to develop strong language skills as scientific, academic communication takes place in English at an amazingly increasing rate, to the detriment of French and German, which, at least in Europe, used to be the communication channels until not very long ago. In fact considering the data offered by Joan Maclean, Professor at the

University of Edinburgh, who delivered a paper on this issue entitled "The Significance of Medical English", at the National Conference of Medical English, at Bucharest, Romania, 12-13 March 1998, and also having my own experience in mind, I cannot agree more on the fact that "English is now the official language in virtually all international medical meetings, and increasingly during the 1990s it is the only official language " (Maclean,1998:4) and it looks to be so for many more years to come. The most significant medical literature has been written in English and therefore English seems to become the language of medicine. This is commonplace at this point in time, but it was for me a real revelation when I heard it stated by the French medical professionals in the closing plenary session at the Medical Conference "The XIII-e Journées Universitaires de Pédagogie Médicale Phrancophone" for the francophone countries, which was held at Nantes, France, in April 1999. There the estimation for English to become the language of medicine was projected in the next ten years.

Having said that, it becomes but evident that reading in English is one of the very important skills that future doctors need to develop.

Our students, generally speaking, learn English during their undergraduate studies to be prepared for future professional needs. For most of them, these future needs are likely to be limited to being able to read medical journals in order to keep up to date, possibly to communicate with foreign medical professionals visiting the country and to present their research both orally and in a written form. Another need has developed lately and at an astonishing speed, viz. reading in order to be able to get updated by navigating on the Internet. In all of these cases our students will have to develop efficient

reading skills as any research presentation, irrespective of its form, also implies reading in the pre-presentation, preparation and documentation period. Therefore mastering English reading skills at a high academic level is a must for our medical students and future medical professionals.

CHAPTER 1

Program Overview

The first chapter aims at describing some of the points to be taken into account in the reading process itself and at introducing the context in which the program is being implemented. It also gives the rationale and a general presentation of the program proper.

The chapter is structured as follows:

- I. The reading process
- II. Teaching situation and target group
- III. Description of the program

I. The reading process

Reading is an active process in which students work intensively, interacting with the text in order to create meaningful discourse. Reading is an active process of problem solving too. Scholars developed a psycholinguistic perspective of reading, focusing on its active, cognitive processes.

Reading in any language is an affective as well as a cognitive process. It seems that in most of the cases the medical reading text can be approached in the efferent way that is in a pragmatic sense, having in mind the purpose of acquiring information.

Taking into account the fact that most of our medical students have a good proficiency in English at an upper-intermediate level, equipping them with efficient reading skills and having them develop independence beyond their classroom, are but realistic aims in our teaching.

The more effectively the medical undergraduates can read, the more easily they can get informed in this overwhelming world from the informational point of view.

Effective reading means being able to read accurately and efficiently, understanding as much of a text as one needs to in order to achieve one's purpose. This might turn to be a problem even in one's mother tongue and therefore the problems are greater in the foreign language - English in our case. The problems can range from a simple matter of not knowing a word to a deficiency in some of the reading techniques (e.g. extracting main ideas, understanding text organization, predicting, checking comprehension, inferring, understanding complex sentences, understanding the writer's style, evaluating the text, writing summaries).

The efficient reader reads rapidly, develops predictions about the content of a passage and guesses unknown vocabulary from the context. The learner should be able to read general texts with comprehension, read flexibly according to his or her purpose, be able to learn language and content from reading, and read with some degree of critical awareness. Identification and interpretation are two types of cognitive skills and they are extremely important in fluent reading. Thus, they use both lower- level skills that allow the readers to rapidly recognize words and grammatical forms, and higher- level skills that allow them to

comprehend and interpret. Fluent readers employ these two types of cognitive skills simultaneously and it is in this way that they gain independence in their continuous learning and education.

Contemporary approaches to reading see meaning as not being fully present in a text, just waiting to be decoded. Meaning is rather seen as being created through the interaction of reader and text.

Reading is a complex information process in which the reader interacts with the text in order to (re)create meaningful discourse. The reader becomes an active, problem-solving individual who coordinates a number of skills and strategies to facilitate comprehension. In this way reading develops motivated, fluent, independent readers who set their own goals and strategies for reading. Being able to read in English gives a person interest and pleasure too.

II. Teaching situation and target group

The program is required for the third year medical students, at the "luliu Hatieganu" University of Medicine and Pharmacy, Cluj - Napoca, Romania.

Level: upper-intermediate/ intermediate-high

Age: about 21

In Romania medical students are considered to be bright ones, usually coming from the best high- schools (Mathematic- Physics High-Schools). In order to be admitted to the Medical School candidates sit a very difficult exam in Biology and Chemistry. As they concentrate on their entrance examination preparation and because of the priority the subjects included in this examination

is given, learning English is generally left aside in the last two years of high-school. Therefore medical students are given a 4-term compulsory English course in the first two years of their medical studies. The fact that they are a little disconnected from English studies is to be seen in most of them quite obviously in the first term of the first academic year when language gaps have to be filled in within the compulsory course of English. The national syllabus encourages the development of the four skills in an integrated way. According to the national syllabus designed within a British Council coordinated program, a slight emphasis is laid on speaking and listening in the first year (two terms) of medical English, while reading and writing are more dealt with in the second year (two terms) of medical English.

However, for the senior-year medical students, who may take an optional course in medical English in the third, fourth, and fifth year of their studies, there has never been developed any language study program, not even at a departmental level, let alone the national one. This is another reason why we felt responsible for this lack at our department and embarked upon the accomplishment of the task of devising a reading program for the third year medical students, and a writing program for the fourth year.

In our medical school the medium of instruction for all subjects for the Romanian medical students is Romanian. Bibliography, extra-reading and the medical information available on the Internet are mostly in English. Problems in teaching/developing reading skills arise because:

 in Romanian schools reading skills (such as developing effective reading skills) are neglected in L1 except for extensive reading and

- school related extra-reading for learning, which are encouraged.
- in English classes reading is dealt with in the "traditional" way, which
 encourages reading aloud for the sake of correct pronunciation. This
 kind of reading might be said to have a 'display' function rather than
 one that offers evidence of learning or reflecting.

Therefore the students require effective reading skills for their university studies and they need support in faster reading. This is our students' reading behavior. The target behavior is for the students to be able to handle unfamiliar authentic texts at an appropriate speed with understanding.

III. Description of the program

The scheduled duration of the course is 30 hours to be taught over 15 weeks in two-hour blocks in the first term (see Appendix, Tables 5, 6, 7).

The program has taken into account the experience gained during the work deployed in the Interim Year Teaching Practicum (IYTP), in the Reading module of the 4-skill Course and at the Sandanona Conference (1999) during the SIT above-mentioned program. I have also devised this reading program for the third year medical students following our department's general orientation for the optional courses, i.e. attempting to constitute an incentive for the students to enroll in the language courses.

Table 1 shows the types of activities included, the main objectives to be attained with the activities, and the sequencing of the activities within the program.

Table 1

Types of activities	Objectives	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Improving reading speed	- to increase Ss' access to information	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2. Activities for meaning negotiation	 to build Ss' self-confidence in interpreting author's message to develop deontological awareness 	*		#		*		*		*		*		*	ļ	*
3. Expressing opinions	 to freely express/defend opinions to develop understanding for other people's interpretations 		*		*		*		*		*		*		*	
4. Extensive reading	 to increase self-confidence, increase respect and appreciation in group, community building 	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
5. Self-Access Center/Bank of Materials	- to increase Ss' responsibility and initiative in their learning	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

In preparing the logistics of the program a very important issue was the selection of the materials to be introduced within it. Establishing the selection criteria was not an easy task but once completed light was brought to the whole program. Chapter 2 gives details on this issue.

Providing the students with whole and authentic texts is an important idea that Grellet (1981) supports. By using this type of texts the students are exposed to the natural system in which the language functions, to the rhetorical structures, to the references, repetitions, discourse markers and to the appropriate vocabulary. The advantage of using authentic texts is their almost unlimited variety and availability. Authentic texts also help students develop the understanding and use of non-linguistic clues, such as pictures, charts, tables, graphs, pie charts, and diagrams. In my opinion this is an important issue that

has to be taken into consideration when teaching reading in a medical context.

Table 2 gives details on what the program contains in terms of types of texts.

Table 2

Skills	Litera- ture	Scientific articles	Newspaper articles	Abstracts	Textbook excerpts	Letters (formal)	Case reports		
Skimming	*	*	*	*	*	*	*	*	
Scanning	*	*	*	*	*	*	*	*	
Predicting				*	*	*	*	*	
Increasing reading speed (timed tasks)		*	ajc	*	*		*		
Negotiating meaning	*								
Expressing opinion	*	*	*				*		

It is impossible to set up a coherent reading program without stating the reading processes that are to be developed within it.

In this respect attention must be given to improving general reading speed (Chapter 4) through preliminary prediction training exercises and timed reading of passages at an appropriate level. Skimming and scanning are specific sub skills and types of reading styles and they are developed within most of the reading classes at our department.

Reading for information is one of the most important purposes that the learners may have in learning English and it is therefore essential to give them practice in this. This is also essential for medical students; hence the program includes ideas in this respect as well, especially in the Self-Access Center part.

Medical students also need to be taught to read for academic information purposes, by looking for clues in titles, sub-titles and within a passage.

Developing sub skills such as understanding cohesion devices, putting together jumbled texts, identifying the main points of importance, distinguishing the main idea from supporting details, extracting points to summarize, anticipating and hypothesizing about the contents are important aspects and they are generally dealt with in all the years of study, but within the program they may be recycled in the prediction part of the improving reading speed area of the present program.

It is important to start with the global understanding- the gist- and then move towards the detailed understanding - top-down -, and then approach the text bottom-up. Students must be helped in developing skills to be able to clarify the contents of a passage (direct reference, inference, deduced meaning-supposition).

Following my SIT learning and experience I consider the Reader

Response Theory very powerful in the overall development for all my students.

That is why a special part of the reading program is taken by the implementation of RRT at our department.

Jack Gantzer (1999) maintains that the literary text is also extremely enriching for the reading classes, considering that reading is an affective process. I applied this idea as well, and I used literary texts both within my RRT classes (Chapter 3) and in the Self–Access Center that is being developed at our department (Chapter 5).

The introduction of literary texts with medical context engages the medical students into an aesthetic mode of responding to the reading text (negotiating meaning and expressing opinions). Maximizing the pleasure of reading is among the most important aims when teaching reading to any students, medical

undergraduates included.

All these assumptions lead to another main idea: reading comprehension should not be separated from other skills. Reading may easily lead to speaking and writing. As skills are seldom dealt with separately in real life, they should not be taught separately either.

Last but not least the schema theory is also important for teaching reading in a medical context. It is used all throughout the program, as each time both teacher and student have to rely on it. It is important because in reading any medical text the students need to activate their schemata, both formal and content.

In the case of medical texts the formal schema mostly refers to the background knowledge of the formal, rhetorical organizational structures of the different types of medical texts (such as the famous Introduction Methods Results and Discussion - IMRAD - that any medical article would contain).

The effective reader brings to the text knowledge of the writing system, knowledge of the language, ability to interpret, knowledge of the world, reasons for reading and his/ her own reading style. The content schema refers to the background knowledge of the content area of a particular text, which the student brings to the text when reading (all the specialist knowledge- physics, chemistry, biology, etc.). This is mostly important for the comprehensive reading of medical texts. The whole schema theory seems to be the tool that allows any reader to transfer the background knowledge and apply it to new texts of a similar type. It is also important in the development of efficient reading skills.

CHAPTER 2

Criteria of material selection

The aim of this chapter is to discuss the criteria of choosing language input, of selecting the ESP/medical materials for the reading program that has been developed at our department.

It is important to state from the very beginning that I shall strictly refer to the written text used in my classroom reading work. Another point of importance is to make clear that the word material refers to the text as transmitter of input message.

Why is the topic important?

There are several reasons why looking at this kind of topic is important.

Firstly, the text as part of the material is in most cases the central part of the lesson, representing the organizing basis of the lesson. Secondly, apart from teacher talk (TT), the text is the major language source providing model exposure to target language (TL). Thirdly, taking into account learners' reactions, attitudes to the text and their expectations about it, the quantity and quality of the input should be influenced. I shall refer to the most important criteria taken into account in choosing the materials for the present program.

The chapter is structured as follows:

- I. Theoretical outline (of the topic on the basis of my background reading)
- II. Criteria used to choose language input within the program, in the medical material bank (analysis of Text I and Text 2, see Appendix)

I. Theoretical outline

Considering the importance of the topic, there is a lot of debate going on about ESP teaching materials, their nature and the criteria of selection.

Hutchinson and Waters (1994: 37) suggest that whenever looking at criteria for evaluating and selecting materials, one has to "look at what is underneath" the surface categorizations such as practical factors (price, availability, etc.), general suitability (age level, linguistic level, learning purpose). Hutchinson and Waters (1994: 47) also consider the evaluation of materials as a process of "judging the fitness of something for a particular purpose". They point out that there are four stages: defining the evaluation criteria, the subjective analysis, the objective analysis, and the matching of the subjective and objective analysis. Thus, they describe the evaluation of texts as an interactive process.

Lewis and Hill (1993) maintain that, apart from practical considerations (who needs the material? is the material versatile? how long will it take to present the material? how difficult is the material? is the material interesting?), considerations referring to the students (will it be useful to the students? does it stimulate their curiosity? is the material relevant to the class and individual? is it fun to do? will it seem worth doing to the students?), the teacher's own considerations have to be taken into account. Lewis and Hill (1993) note that "no matter how good an idea, in the end it is you the individual teacher who has to handle it". This seems to me one of the major aspects of the teaching /learning process.

II. Criteria used to choose language input in the medical material bank
I shall refer to the materials that I included in the reading program devised

for the third year medical undergraduates, at the University of Medicine and Pharmacy "Iuliu Hatieganu", at Cluj-Napoca, Romania. I shall also refer to the criteria that I considered important when I selected my materials, having in mind Hill's last mentioned quotation.

As any teaching situation, mine is unique too. As I stated in the previous chapter there was no language program for the senior- year students, hence a shortage of medical English materials at the department as well.

Embarking upon the task that I had within the department in this respect, I had to select the materials I needed for the third year medical students, Upper-intermediate level/Intermediate- High. Considering the ACTFL Proficiency Guidelines this level reading is characterized in broad lines as follows: "Able to read with full understanding simple connected texts dealing with basic personal and social needs about which the reader has personal interest and /or knowledge. Can get some main ideas and information from texts. /.../ Structural complexity may interfere with comprehension; /.../ has some difficulty with the cohesive factors in discourse, such as matching pronouns with referents. While texts do not differ significantly from those at the Advanced level, comprehension is less consistent. May have to read material several times for understanding."

Taking into account the above features I selected texts similar in difficulty to those that are used in the Cambridge Advanced Examination Reading Paper, which I am familiar with from my teaching the special preparation groups for these examinations at Access Language Center, at Cluj-Napoca.

The selection had to meet the students' needs, as seen in the description above, and the requirements of the academic curriculum as well. Therefore I

turned to well-known English medical textbooks (Gray's Anatomy, Harrisson's Principles of Internal Medicine, Henry E. Sigerist's A History of Medicine), and even to the Internet, following the curriculum of my students. I also selected literary texts written by doctors or about doctors. I considered that the texts had to be real, authentic, that is written by native speakers and taken from valid medical textbooks or journals. I was definitely positive about the idea that from a conceptual point of view, the content of the texts was good, extremely rich and at an appropriate level for my students. What I felt as a hindrance in my endeavor was that some of them were difficult to exploit, from the language point of view, because some of them seemed to me banal in expression.

In what follows, I shall list the main criteria on my checklist.

1. From a linguistic point of view:

- the materials had not to be too difficult; they had to match the students' level; the most important thing with them was that they had to recycle the language problems already dealt with in the previous years, but at a higher level.
- the materials had to provide models of correct and appropriate language use.

2. From a conceptual point of view:

- the materials had to supplement the input provided by the teacher and constitute an opportunity for the learners' medical background knowledge to be used, meaning that the students' possible schemata had to be taken into consideration as well.
- the materials had to be appropriate to the learners' background

knowledge.

 the materials had to cover topics of high interest in the today's medical science: e.g. Disease, Prognosis and diagnosis, Stress, Euthanasia, AIDS, Clones, Genetic Engineering, Obesity,
 Vegetarianism, etc.

3. From a methodological point of view:

- an important point was for the students to be kept busy, engaged and involved, all through the class
- providing variety within each class, across the program was also taken into account.
- the topic of the medical reading text had to also reach the highly-specialized academic level.
- integrating the four skills was a matter of importance as well.

4. From a motivational point of view:

By motivational characteristics I mean that the subject content of the text itself should be likely to engage the learners' enthusiasm and interest not only in the language as such, but also in the information and feelings about that very subject content. The subject content of the reading text itself should provide a stimulus for oral/written work as well.

What I think is likely to involve my students' interest most are the hot medical issues and the general and human topics - touching medicine at some point or being approached from a medical angle. Such topics are: "What if your best friend had AIDS?", "Euthanasia and human rights", "Transplants and banks of organs", "Giving birth and Abortion", Clones - reality of our days". They are

likely to stimulate my students in achieving communicative competence. The subject topics are within the conceptual grasp of the students and would involve their medical background knowledge and knowledge of the world in a very active way. Thus, the learners' interest is kept at the top level. I also considered that my students would be highly motivated. Their whole attitude towards language learning would be more positive, with a low affective filter, to use one Krashen's paradigms, and they would be more successful.

Another important thing at this point is that topics of general and human interest, which add a humanistic value to the input such as those mentioned above, would also be to my liking as a teacher. Thus I could become as Hutchinson and Waters (1994: 40) say," a manager of learning, a further resource". It is the type of text I can adapt to my personality. I would no longer find myself in the absurd position of teaching a text that I do not like at all. Einstein's statement, about the most important motive for work in school and in life being the pleasure in work, would thus become reality.

The selected materials were included in the program and also became a medical material bank. Out of them fifteen unit texts on topics such as: The Citadel by A. J. Cronin, Philadelphia by Christopher Davies, The Hippocratic Oath, etc. (see Appendix, Tables 5, 6, 7) were used in the program. The major quality of these materials is that they are authentic, as they are not produced for language teaching purposes. They were selected from the students' own specialisms: pathology, history of medicine, medical humanities. All the abovementioned specialisms are accessible to medical students in general. Third year medical students are conversant with the topics as they have more medical

competence, but still not enough to grasp the scientific complexity of a pathology text. However, I included pathology texts in the materials as well, because they offer a rich choice of language and opportunities of developing the language skills at an appropriate level. The result of this situation and checklist of criteria was a selection of highly scientific academic materials.

Considering the materials included in this program mention must be made of the fact that they are authentic ones. They were included in typed form, though, and not in their original form as printed, because of technical and esthetical reasons. However, as it is more useful for the students to get exposure to the authentic materials as printed, when I use the materials in class, I actually use sets of photocopies of the original pages from the books. Another final point of note is that some of the materials included are also accompanied by activities that I devised. The materials which I included without activities can be used in the same ways as the other materials, according to the objectives of the teacher within a particular class.

In order to exemplify the above ideas I will bring forward a unit text organized as "The Blood Vascular System" (see Appendix, Text 1). The texts of this type used as input provide opportunities for the students to use their background knowledge, as they are factual, descriptive ones. The texts constitute a vehicle for language learning. Text coherence and organization of the information within the text, which are very important for medical students and which have been dealt with in the previous years, can be recycled in an appropriate way, if need be. These texts also provide some new vocabulary items and the real model of correct and appropriate language that is used in medicine, viz. anatomy,

physiology and pathology.

Another example is to be seen in Appendix, Text 2. The text is an authentic one, taken from the novel Philadelphia by Christopher Davies. Such texts have potential to develop students' communicative competence and to generate interesting participatory tasks. Such a choice of materials would involve creative thinking, too, and would change all the parameters involved in second language learning/teaching for the better. The text corresponds from a linguistic point of view for my medical students, at an upper-intermediate level, being definitely within the students' linguistic grasp. Conceptually the text is relevant to them as well, AIDS being one of the hottest medical topics much on debate nowadays. The message transmitted by the text can be empathetically comprehended. From a motivational point of view, my students would be extremely interested in the text subject content as it provides opportunities of interdisciplinary links between medicine, literature, cinema, and ethics. Opportunities for communicative competence are also provided. Such a text would make my students feel they are part of the real world in the English class, too. From a methodological point of view, I find that such a material has great potential to develop learners' communicative competence. It has a good potential to generate participatory tasks in an interactive setting.

CHAPTER 3

Reader Response Theory

The chapter presents the Reader Response Theory (RRT) as experienced at our department in the teaching/learning process of medical English, within the partial piloting period of the reading program for the third year medical students, during the last academic year. It is always to follow the improvement of reading speed within each class/session, so it is allotted from one hour and fifty minutes (week 1-5), to one hour and forty minutes (week 6-10) and to one hour and thirty minutes (week 11-15).

Reading is a complex information process in which the reader interacts with the text in order to (re)create meaningful discourse. The reader becomes an active, problem-solving individual who coordinates a number of skills and strategies to facilitate comprehension.

Contemporary approaches to reading see meaning as not being fully present in a text, just waiting to be decoded. Meaning is rather seen as being created through the interaction of reader and text.

There are two opposing modes of experiencing a text, as Rosenblatt (1938) holds it. The "efferent" and the "aesthetic" modes are the two ways in which students can respond in the process of reading. In other words, reading in any language is a cognitive as well as an affective process.

In most of the cases the medical/scientific reading text can be approached

in the efferent way, i.e. in a cognitive sense to acquire information.

Jack Gantzer (1999, presentation at SIT) maintains that the literary text is extremely powerful and enriching for the reading classes, considering the affective part of the reading process.

The introduction of literary texts with medical context was one of my major insights at SIT and I was very eager to implement Gantzer's idea within the present reading program. This type of text engages the medical students into an aesthetic/emotional mode of responding to the reading text. Thus the students develop skills for meaning negotiation, and for expressing/defending their own opinions. They build self-confidence in interpreting the author's message and at the same time they develop understanding for other people's interpretations. Through this dynamic process the students develop awareness of their emotions, empathy, concern for other human beings - a kind of ethical engagement. This process can project the medical student both into his/her past and future experience. This motivates the students to debate and internalize deontological issues, which are important aspects in the formation of future doctors, but which are not given sufficient attention in our academic curriculum. This also helps develop independent thinking, as there is no "authority" with which the students have to comply, but the students' own comprehension and transaction while reading the text. Another aspect worth taking into consideration is the selfconfidence building power of the sustained silent reading (SSR). Followed by summarizing tasks, debating tasks or even creative writing tasks, the reading class may come to know some fresh air.

Part of the pleasure of reading literary texts is to use the ability to

appreciate theme, plot, setting, and characterization, and to have the confidence to trust one's own perceptions about what has been written and to voice one's ideas if required. These skills are most fully developed and refined with authentic texts. The texts that I introduced in this part of the reading program pertain (see Appendix, Tables 5,6,7) to the medical field in the way that they either reflect the atmosphere in a medical setting or situation (Coma, Philadelphia, A Farewell to Arms), have a medical professional as the main character (The Citadel) or were simply written by doctors who became famous writers by quitting medicine or not necessarily (the case of Albert Schweitzer).

From my experience it is essential to foster an attitude of pleasure and interest among the students in order to enable them to continue contact with the foreign language even when the compulsory/optional language studies are over. If reading becomes a pleasure by being associated with the opportunity to express views without penalty, as it happens in RRT, then motivation to read is also fostered. It is of utmost importance to design reading tasks, which enable students to draw conclusions of their own rather than to reach a particular conclusion. Maximizing the pleasure of reading is among the most important aims when teaching reading to any students, even more so to medical undergraduates.

Personal reactions to a text during the reading process are very-important for the medical undergraduates who, as future doctors, need to develop their empathy, their concern for other people, as stated above, and that is why the best way of realizing this is RRT, in my opinion. Individual interpretations and group debates are an opportunity for the students to get insights of the most

difficult to grasp deontological issues. Works of literature that take medicine as their topic have special power to elicit the empathy essential to patient-centered health care.

As I piloted this part of the program, the students had to freely respond to a text read (SSR) in class. They also made meaning from a text through prediction, anticipation and inference or they debated on controversial topics. By using dialogue and group discussion the third year medical undergraduates shared and defended their reactions to the text and listened to and respected the interpretations of their peers, as they came out of the peers' transaction with the text. In this way there was a permanent interrelationship between the student and the text to read. The activities helped them build and imagine their own world, create their visual images, make connections to their own lives and projections into their future medical careers, by reflecting on their transaction with the text. They also stated their personal values and beliefs, learned to respect each other's opinions, developed independent thinking and got interested in the reading proper even by personal involvement. Another benefit of using RRT was that students were no longer threatened by having to know the right answer or interpretation of a text.

In this way the students learned how to have their own transaction with a text and they also deepened their understanding of the text they had to read within the class time. I expected the students to have difficulty in expressing their own opinions and to be "shy" at first, and this actually happened with the first text I brought to class and used applying Gantzer's ideas of RRT. I only asked them to read the text and allotted them the time to do that, and then I required them to

express their feelings opinions at random, but the students just could not break the ice, while I was observing the process going on. After I asked a general question the stream of opinions started to flow and, to my surprise, it was hard to stop it.

As it came out from this first experience with RRT, it emphasizes the value of literature for both self-knowledge and understanding others. It focuses on the importance of individual consciousness while turning away from critical authority. This theory is based on the idea that the reader's reactions to a text are responsible for any interpretation of that particular reading. An important idea that the theory is based on, and my students clearly understood, is the fact that the readers are neither passive receivers nor distant spectators of the text. "A work of literature only comes to life when readers meet it half way, bring to it their unique experiences and insight." (Karolides1992: 16)

Louise Rosenblatt (1983) points out, in her book <u>Literature as Exploration</u>, the idea that when a piece of literature is successful for readers, that success comes from the fact that they bring to the selection all that they are and have experienced. Thus, reading is not at all a passive act. The result of the interaction and mingling of reader and text will never be duplicated; the text will always be changed by the touch of the reader's eyes, as it contains the unique quality of the single reader.

This is like "experiential" reading, the two participants - reader and text - in the process of reading mutually acting on each other. It is not important that the students "agree" with one true interpretation. The medical undergraduate is an active creator and does not comply with the "authority" (critics or scholars). Thus

another benefit of using RRT is that the students are no longer threatened by having to know the "right" answer or interpretation of a text. This removes the fear of speaking out and being wrong or having to conform to someone else's interpretation of the text. In RRT the student is secure in the knowledge that questions regarding word usage, vocabulary, meaning etc., will be answered in peer discussion groups in class. By listening to classmates' questions and answers - without passing judgment - a degree of comprehension can be reached and by working together in this way students' motivation to create meaning from the text can improve.

It is important that the students share their response and consider with respect the responses of their peers. I believe that students should have a more active part in their own learning process. Through dialogue and open discussion this may be achieved more easily. It is rewarding to notice that students become intellectually and emotionally involved with what they read. They are willing to voice their ideas and opinions through free conversation and the exchange of ideas. After one's own discovery and self-confidence built within one's personality, the excitement of literature comes from the very diversity of responses. It is quite rewarding to find out both similar and different opinions to the ones held by oneself.

In the transactional reading process, as I could see from my RRT classes, the students' responses to a text differed from individual to individual according to their intelligence, maturity, motivation and last but not least, to their command of English. This range of responses results from the dynamic relationship between students and text, from the differences among the students, and from

the aspects of the text that are ambiguous or undefined.

Each student is different and therefore each one interprets a text differently. I, as a class manager/teacher, had to take these differences into account and allow the students to feel free to express their diverse interpretations in their struggle to understand the text. Although our medical undergraduates are about the same age, of similar background and circle of relationships they express differences in general impression and nuances of feelings. This can be perceived from even a quick look at the texts in Appendix. Some of the students were more careful and perceptive, thus getting more from their response to the text as can be seen from the texts produced by some of them and presented in Appendix. Less able readers got less from the same text. However, both categories were mining for the gold the author had deposited within the text.

Thus the range of possible readings of a single text is potentially infinite.

The reading event for each student is unique - given the different reading occasions, the particular times and circumstances, and the different moods and frames of mind.

After my experience with RRT I am totally convinced that teaching literature to medical students can provide them with skills that the profession lacks. Patients suffer quite a lot the consequences of a medicine practiced by doctors who cannot adopt an alien perspective; who cannot follow a narrative thread; who become unreliable narrators of other people's stories; who are deaf to the other's voice and image; who do not always include in their regard human motives, symbols or yearnings. Literature can help medicine accurately interpret the stories of sickness and courageously recognize and thereby soften - human

suffering.

Training medical students to examine the specific elements of a textnarrative frame, time, plot - prepares them for disciplined readings of the texts of
medicine (hospital charts, diagnostic images, stories that patients tell, physical
and examinations of patients). When listening to a clinical story the medical
student ought to notice - out of routine - the narrative frame, the temporal
dimensions, the plot. By inspecting a text's narrative plot one answers many
questions: How are the teller and listener related? How reliable might teller and
listener be?

In what follows I would like to reflect on an RRT lesson piloted within the reading program.

What I did: I asked my students (a group of ten - out of twenty-five - medical students attending the optional English class in the third year) to get seated in a circle, considering that the group energy would get together and that in this way they would feel safer and more secure. I stayed outside the circle. I explained the procedure to my students. I told them they were going to freely read the text (a literary passage) "Resuscitation" from The Citadel by A. J. Cronin (see Appendix, Tables 5,6,7). I also asked them to try not to get disturbed in their reading by unknown words if they, more or less, could understand the meaning from the context. I also required them to ask their peers questions about the text when the reading was finished. I was to signal when the questioning time started. I set a time limit of 30 minutes for the reading proper (SSR). I considered the length of the text and the fact that there were some rather difficult items of vocabulary, which could create some problems, but I expected my students to

get over them with one another's help, within the group. At the end of the class I asked them to write their feelings about the text as homework (see Appendix, Student Sample Texts)

. What the students did (What I observed): Students had no difficulty or hesitation in getting to achieve their task, as working by RRT was not the first attempt within the program on that particular session. We had already had other sessions before in the same theoretical approach. As they plunged into reading the text, problems started to occur with unknown words such as: burly, ye, stout, snatch, rustle, gaze, flaccid, damp, sodden, stem, haggard, stark, giddy, etc. In most of the cases they helped one another out, as I had expected them to. Students had initiative in helping those in difficulty by using their mother tongue (Romanian, Hungarian as was the case). It was great to watch them interact in order to help out, and at the same time it was absolutely fascinating to see them so energy driven in their SSR. When time was up, all of them were ready for the questions. At first there was a period of silence due maybe to shyness, but once ice was broken there came a real flux of questions and answers to them. Questions sounded like this: Why was everyone in the room tense and preoccupied? Was the child a wanted one? Why didn't the mother want to be given chloroform? What was the doctor's dilemma? Did Andrew lose hope at any time while trying to save the baby? Why did the doctor feel defeated and hopeless? Did Andrew give up after his first attempt was not successful? What would you have felt and done in his place? What was the nurse's reaction to the child's cry? What was Andrew's feeling about his last case? Was he pleased and proud of what he did? The students were extremely engaged in giving the

answers to the questions, they were very cooperative and well motivated. They expressed their own opinions about the text and about the situation, extending it to their own life experience. Their level of energy was up all throughout the class, which was great to observe.

What to do next: considering this experience I could anticipate the students' vocabulary problems and have a pre-reading task, for scaffolding, in which to ask students to work on certain vocabulary items, that I think might be unknown to them. In this way a shortcut to the text could be created, which would allow more time for the question and answer part of the class as well as for the teacher's feedback. Grounded on this experience, I also think that the follow-up activity, i.e. the writing task, could be more precisely formulated, in such a way as to focus on the students own opinions and lives following the reading proper. I would also diversify the activity type by using response journals.

What I learned from this:

- engaging implies the emotional reaction in creating the meaning of the reading text
- learning is facilitated when students feel more secure (I was at the back of the class observing but not interfering with the process once in progress)
- the way students respond depends on their maturity, range of interests, general knowledge and command of English
- it is rather difficult to predict the course of such a lesson
- this type of activity helps fostering students' initiative and building the community as well

- timing is extremely important in this kind of activity.

My conclusion to this attempt of implementing RRT in the reading program of the optional English classes of the third year medical students is that the more the students approach the medical literary texts; they grow in self-knowledge and self-confidence. They become better readers and thus their command of English also improves by this exposure to an interactive environment.

CHAPTER 4

Improving Reading Speed

This chapter focuses on means of improving the reading speed of medical students because this is one of the major needs they are not equipped with.

This part of the program is grounded on authorized opinions in literature.

Nuttall (1982: 21) suggests as reading program objectives: to enable students to read without help unfamiliar authentic texts, at appropriate speed, silently and with adequate understanding. Nuttall (1982: 22) also observes that "it is not always appropriate to concentrate on reading fast; a flexible speed is the sign of a complete reader; we should prefer to read fast if we can do it without loss of effectiveness"; training students to use different rates for different materials and different purposes is therefore also important.

The chapter discusses in detail the necessary aspects to be taken into account when considering this issue. It is structured as follows:

- Objectives and description of the part of the program referring to the improvement of the reading speed
 - II. Techniques
- I. Objectives and description of the part of the program referring to the improvement of the reading speed

For this part of the present program the following objectives listed by

Davies (1995: 121-122) can be applied:

- provide opportunity for students to draw upon well-established schemata as top-down source of information for processing a wide range of texts and genres.
- encourage awareness of spoken-written contrasts.
- involve students in analysis and evaluation of different study strategies.
- ensure that students feel responsible for their study reading and confident of the progress they are making.

These objectives, which can be added to the ones mentioned above and which Nuttall maintains as essential, seem to me very important, especially the one referring to developing a feeling of confidence about the progress the students are making. This, in a way, brings about the motivational aspect and keeps motivation at a high level.

The first reading program objective mentioned above is of great interest to me as it involves the aspect of reading for information. It is in close connection with the idea of increasing students' access to more information by improving their reading speed.

In my opinion raising students' awareness to the diversity of texts and to their features in accordance with target reader, style and register would increase the students' motivation of reading in the foreign language (FL). It is of real importance for the students to be able to identify types of texts (literature texts, scientific articles, newspaper articles, abstracts of medical articles, textbook excerpts, formal letters, case reports/histories, leaflets) by becoming aware of

characteristic text features. Building the students' formal/content schema, by analyzing elements of structure and discourse, is of utmost importance in developing efficient reading skills with medical students. This also brings about the idea of reading in a certain way for a specific purpose, i.e. developing different reading strategies for different texts. These aspects can be recycled within the present program too if need be, though they were dealt with in the previous years of medical English.

Taking into account the fact that our third year medical students have good proficiency at an upper-intermediate level, I consider that a greater amount of authentic texts can be introduced, together with appropriate tasks. It is essential to bear in mind that the third year of medical studies is in fact the first optional year of English (for some of the students actually the third of medical English, while for others it might be the first of medical English, after the completion of the compulsory program of two years of medical English, French or German - depending on the students option and placement in the first year of medical studies). It is common knowledge worldwide that medical students and doctors have to cope with tremendous amounts of reading material during their lives. The more effectively a medical student can read, the more effectively he/she can "gain access to the capital of information he is supposed to gather" (Williams, 1981: 126). All the above-mentioned objectives are, in my opinion, long-term objectives.

The scheduled duration of this section within the present program is 10-30 minutes, within each class to be taught over 15 weeks, in the first term.

During the English classes of the optional course with the third year

medical students the speed improvement part of the reading program can take 10-30 minutes (10 minutes in weeks 1-5; 20 minutes in weeks 6-10; 30 minutes in weeks 11-15) of each session. This should be so, as improving reading speed has to be part of the whole reading program and, on the other hand, reading should be integrated in the development of the other skills.

Considering the target behavior, it is important to remember that students will never read efficiently unless they understand the differences between texts, unless they are capable of spotting the elements of structure and discourse and unless they can adapt their reading speed and technique to their aim when reading. This is why the reading program has to be extremely flexible and adjust to the instant needs of the students. I devised the speed improvement part of the reading program as follows (see Table 3), allotting more time to the most difficult to acquire techniques and sub skills:

Table 3

	Week/Session	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Use of OHP (prediction, structure, discourse)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
2	Timed reading						*	*	*	*	*	*	*	*	*	*
3	Skimming & scanning											*	*	*	*	*

In this part of the program I will focus on faster reading because I consider that our students are rather slow readers and it is only sensible, in my opinion, to think that they need practice in faster reading in order to improve their reading

speed and get to an adequate, appropriate one. It also seems better to restrict the program to a clearly definable and attainable short-term objective.

II. Techniques

Grellet (1981: 16) suggests that: "Students who read too slowly will easily get discouraged. They will also tend to stumble on unfamiliar words and fail to grasp the meaning of the passage."

I believe that it is imperative to train medical students in improving their reading speed if speed can also influence the grasping of the general meaning. They must have an adequate understanding of the text they read. They must understand completely when necessary, but they must also learn that it is wasteful to read with the same care for every purpose. In order to achieve the important aim of improving reading speed with understanding, attention should be paid to improving general reading speed through the following techniques:

- a. Use of overhead projector (OHP)
- Timed reading at the appropriate level (in our case: upperintermediate/high-intermediate)
- c. Skimming and scanning

a. Use of OHP

Nuttall (1982: 39) considers that the "overhead projector (OHP) transparencies offer many advantages and possibilities of exploitation" for the teacher of reading, especially if skills of improving reading speed are on focus:

- the projected text holds students' attention and improves their concentration

- the teacher may be able to spot students with problems as:
 - subvocalization
 - head movements (though such movements may be different when reading a text on an OHP and in a book)
- it is impossible for them to refer to a dictionary during the
 presentation of the text (using a dictionary slows down the reading speed)
- the teacher has total control of the length of exposure and he/she can expose as much or as little of the text as he/she wishes to by using a mask, and asking the students to predict

Nuttall (1982: 40) appreciates that an OHP is "a most versatile aid for the reading class." Considering the teaching situation at our department I included the use of the OHP in this part of the reading program in the way described above starting with the very first session of the program and throughout the whole term mainly for a ten-minute prediction task. All along with the prediction task, discourse analysis can be tackled if needed. In these activities I used a selection of case histories/reports (see Appendix, Text 3), abstracts, letters (see Appendix, Text 4, Text 5), textbook excerpts (see Appendix, Text 1), leaflets that I had the students predict in terms of text content and text organization (see Appendix, Tables 5, 6, 7). Mention must be made of the fact that third year medical students have a clear picture of what a case history or an abstract should look like in their mother tongue, as they deal with such texts in the semeiology/symptomatology course they take all throughout the academic year. Moreover, within the medical English classes of the second year, they also

become familiar with these types of texts, as they need them for the preparation of the final project. So, they bring to the English class a definite content/formal schema of this type of text in the third year.

What I did: I showed the first row on the transparency, masking the whole remaining text, and I asked the students what they thought the following row on the transparency was about. The students gave their tips and then I unmasked the row to see what connections they had made when giving their tips. It was usually a complex matter as the prediction could depend on content, on text organization, on grammar language issues (verb forms, references, use of pronouns) and as so many aspects had to be taken into consideration at a time. The spirit of inquiry and interest was maintained throughout the analysis of the text. No matter how difficult it was at times, the students found it fun to predict. This type of activity kept the students engaged and actively involved for the whole time slot allotted to it (10 minutes) within each session.

The use of the OHP helped with the improvement of the reading speed of the medical students within the program as expected.

b. Timed reading

At a high-intermediate level and later at an advanced level students will come across quite long texts, so they need to be able to read efficiently. An efficient reader would process written material as groups of words (3-4 words at a time) rather than as single words, widening the eye span. This is what I am aiming at with my students within this reading program, by raising their awareness of this aspect as many times as need be.

One of the most common ways of increasing speed is to give students passages to read and to ask them to time themselves, with a view to steadily increasing their reading speed. Mosback and Mosback (1976: Preface) suggest that the passage intended to be used, in this respect, should be "of approximately equal length (500 words) and the same level of difficulty throughout, to allow a really meaningful comparison of reading speeds and comprehension at the beginning and end". Students have a chart (see Table 4) which they fill in with their scores over the program.

Table 4

Session	Time	Comprehension
#6	5 minutes + 5 minutes	50%
#7		
#8		
#9		
#10		
#11		
#12		
#13		
#14		
#15	3 minutes + 3 minutes	70%

Students should keep this individual progress chart over the program in order for their speed improvement to be materialized. This would allow their progress to be monitored. Considering this I selected authentic texts, especially case histories and medical articles from the British Medical Journal (BMJ).

The text that I chose to exemplify the procedure is "Smoking and cancer" (see Appendix, Text 6). Each student receives a copy of the text and the instructions are given to the whole class. Everybody starts reading at the same time and will finish at his/her own speed writing down on his/her chart the last time I mark on the blackboard (I do this each time I see a student signaling the end of his/her reading by a raise of hand).

The next step is for the student to turn to the exercise/task following the text and deal with it individually. This is also a timed activity.

The value of the whole task is to be discussed after it has been completed by the entire class, encouraging slower readers in trying something similar by themselves, beyond class work.

Mosback considers that 5 minutes are enough for an average 500 - word passage to be read, and this is the time that I consider necessary for our students as well. Another 5 minutes are needed for accomplishing the task that follows the reading text. The records can be kept both by the teacher who needs them for feedback and by the students if they want to do extra-work. I asked my students to keep their individual records themselves (see Table 4), allowing me access to their progress chart any time.

The aim of this type of task is to increase reading speed to the point where the students can read texts of average difficulty of between 400 and 500 words at an average of more than 100 w.p.m. up to 200 or even 300 w.p.m., with 70% or more comprehension. Comprehension is to be measured considering the answers to the True/False type of questions (see Appendix, Text 6)

Generally, I would expect my students to improve their reading speed by

about 50%, after the completion of the program. As only parts of the present program were rigorously piloted I cannot yet estimate the progress realized by my last year students. This program needs to be fully implemented and only on its completion can I comment upon results.

The timed section of the program comprises ten timed tasks, but if more such tasks are required, adjustments to the program will be made, from its beginning, according to each group. The program is flexible and adaptable to the immediate needs of the students.

c. Skimming and Scanning

Other types of techniques that seem useful for this section of the program are skimming and scanning, both aiming at improving not only the speed but also the comprehensive aspect of my students' reading skills.

Grellet (1981; 19) considers that "both skimming and scanning are specific reading techniques necessary for quick and efficient reading."

Nuttall (1982: 34) maintains that "the distinction between the two is not particularly important". In both skimming and scanning the reader reads at a rate, which permits him/her to take only the beginnings and ends of paragraphs, chapter headings, subtitles etc., i.e. to select the portions of a text that are worth spending time on, and which are actually of interest.

When skimming, the students go through the reading material in order to get the gist of it, to get an idea of the tone or the intention of the writer, to get a general idea of what the text is about. When skimming, the students glance quickly through the reading text in order to get superficially informed about

issues, which are not of great importance. They can be asked to get the gist, answer questions just by looking quickly at the text. Speed is essential with this type of activity too, and therefore I consider that fixing a time limit to each activity is of real importance having in view the objectives of this part of the program.

When scanning, the students only try to fast locate specific information, particular points of information (e.g. a figure, a date) and often they do not even follow the organization of the text to do so. They simply let their eyes wander over the text until they find what they are looking for, whether it is a name, a date, or a less specific piece of information.

Nuttall (1982:41) suggests that "in speed exercises of all kinds, students should be motivated to beat their own records, not to compete with one another." However, scanning can be done competitively in order to add to the fast completion of the task, and thus the aim of improving the reading speed of the students can also be achieved.

Skimming is a more thorough activity, which requires an overall view of the text and implies a definite reading competence, in Grellet's opinion (1981: 19). Scanning, on the other hand, is more limited as it only deals with retrieving the information relevant to our purpose.

It is usual to make use of the two techniques together when reading a given text. This is why I also introduced both skimming and scanning together in this part of the program, starting with session 11 up to the end of the program (for about 10 minutes).

Students should be able to function in English as efficiently as they do in Romanian at their achieved level. I think it is important for the students to know

how irrelevant it is to read everything and plod word by word. I consider that it is not of less importance to raise the students' awareness of the fact that by reading all the texts in the same way, they would waste time and fail to remember important points for them because they would absorb too much information. Thus they should be taught to adapt their reading speed and technique to their purpose when reading.

The type of skimming and scanning tasks suggested in this program should therefore help to make the students faster and more efficient readers.

In order to exemplify how I try to develop skimming and scanning I suggest "A Case History" as a text (see Appendix, Text 7).

The students are given the text and are instructed to read it in order to find the information they are required as quickly as possible without exceeding 5 minutes. At the end of the task students are asked, at random, to supply the data and check as a class if their answers are correct. Whenever students have problems these are dealt with immediately, so that nothing is left unexplained. This offers the students not only a purpose for the activity but also a means of understanding their lacks and how to work on them.

The same text "A Case History" can be approached for skimming for gist because its content is already known and the students will not find the activity too difficult. More detailed questions can be offered as prompts.

Another example, that I made use of, is the following: the students may skim through a medical article first just to know whether it is worth reading, then read it through more carefully if it has been decided it is of interest. It is also possible to scan the same article afterwards in order to note down a figure, a

name, which the students should particularly remember.

Unless the teacher encourages the students to skim and scan, they may never dare to do so, because of not having been used to.

Scanning - skimming tasks should contribute to building up the students' self- confidence by showing them how much they can learn simply by looking at an article. They should make students better and faster readers, i.e. readers who can decide quickly what they want or need to read which is extremely important in nowadays' informational boom.

In my experience, these techniques can be practiced with a variety of texts: students can move on from texts with clear layout - such as scientific articles, abstracts, case reports, letters, leaflets - to continuous prose texts — such as literary texts, newspaper articles, textbook excerpts. If students do not feel the usefulness or relevance of skimming and scanning, and this happens quite often, I think they should be reminded, at least this is what I do, of materials they will automatically scan in their profession, such as: lists of medical articles, labels on medicine bottles, leaflets, dictionary entries, medical handbooks, information from medical articles, contents of medical journals, contents of medical textbooks, etc.

To conclude, improving reading speed is useful to students who are required to read long texts. According to their different purposes, interests and abilities students read at different rates, and this is why we should encourage them to improve their own reading speed. On the completion of the program I would expect my students to be aware of the importance of improving their reading speed as well.

CHAPTER 5

Self-Access Center

The chapter presents the Self-Access Center/Bank of Materials as it was started up at our department, its benefits and ways to make use of it in order to improve students' reading skills. This place has been set up having in mind the Self-Access Center from SIT.

The Self – Access Center (or closer to our departmental situation the Self-Access Bank of Materials) is a place where once a learner enters he/she never wants to leave. I suppose this might sound intriguing, but this type of place is luring, inspiring and conductive to learning English. What makes the place so special and attractive is the fact that all the things that can be done here are for the learner's own interest. He/she can work at their own level and pace, when they have time, depending on their interests, on their own or with one or more colleagues, with the teacher as a guide by their side. It is the place where the students can practice extensive reading. Everything that is done in the classroom can be done in this center/bank of materials but in a self-instructional mode. That means that the student makes decisions about and assumes responsibilities for his/her own learning while having direct access to the various materials.

There are quite a large variety of classified learning materials (some of them specially designed and adapted, "with Key") in this center/bank of materials.

The main objective of this center/bank of materials being set up is to increase students' responsibility and initiative in their learning, specifically in

further developing their reading skills and habit of reading. At the same time it is essential to increase self-confidence, increase respect and appreciation within the group, and build an even stronger community.

As I stated at the beginning of this program description, the aim of this reading program is for our students to read better, fast and with much understanding. In order to achieve this it is essential for the students to have opportunities to read more in English. One of the ways of increasing these opportunities, beyond the classroom requirements, is by tempting them to read more. Needing to read books, for study or other purposes should also imply the factor of enjoyment. I strongly believe that wanting to read books because of the enjoyment they bring about is a real incentive for any student.

Among the third year medical students who attended the optional English course there were quite many who have a genuine appetite for reading books. I think that no effort in supplying the center with books is too big when you get the rewarding attitude on behalf of your students who come and ask for more and more reading books in English.

Providing the center/bank of materials with books was mainly done on a personal effort basis, as fiction books with medical content (e.g. setting in a hospital, a doctor as the main character, the writer of the book a doctor himself/herself) are scarce in our environment. These books, however, are the ones capable of forming the reading habit with the medical students (in a world in which television and computers have taken over), and they are the ones that can make reading enjoyable considering the students' present interests. They are also the ones to offer enjoyment to the medical readers, as the students can

easily identify themselves with the characters or they can draw parallels and comparisons between their lives and the life going on in the book. These books are appealing to the students as they supply what they really want in terms of non-specialism reading.

Considering the readability and suitability of content criteria the book selection includes American and English literature written by famous Nobel Prize winners connected in some ways with medicine, or written by former doctors who quitted medicine in favor of fiction writing. From amongst the titles that the center/bank of materials is provided with mention must be made of the following: On Human Bondage by Somerset Maugham, The Citadel by A. J. Cronin, Out of My Life and Thought by Albert Schweitzer, The Story of San Michele by Axel Munthe, Sorrell and Son by Warwick Deeping, The Final Diagnosis by Arthur Hailey, A Farewell to Arms by Ernest Hemingway, The Dean's December by Saul Bellow, One Flew over the Cuckoo's Nest by Ken Kesey, Love Story by Erich Segal, County Hospital by Barbara Harisson, Coma by Robin Cook, Philadelphia by Christopher Davies, Ambulance by Hugh Miller, Clinic by Peter Baker, Albert Einstein, The Human Side -selected and edited by Helen Dukas and Banesh Hoffmann, The Doctors Mayo by Helen Clapesattle, Questions and Answers on Death and Dying by Elisabeth Kubler-Ross, Life After Life by Raymond A. Moody, Jr., M. D., Reflections on Life after Life by Raymond A. Moody, Jr., M. D., Living Beyond Fear by Jeanne Segal, Ph.D., The Miracle of Colour Healing by Vicky Wall.

The center/bank of materials is organized on areas of interest (sections) as follows:

- General English materials classified as: Speaking, Listening, Reading,
 Writing, Grammar, Vocabulary materials with Key (most of them).
- Medical English materials classified as: Speaking, Listening, Reading,
 Writing, Grammar, Vocabulary materials with Key (most of them).
- 3. *Literature and Medicine*: fiction books with medical content (some of them listed above).
- 4. Medicine: copies of medical articles from medical journals (e.g. BMJ), a selection of case histories/reports, a selection of medicine textbook excerpts, a collection of medical biographies.

In the near future a computer with Internet connection will, hopefully, be set in place as well. This would enable us to advise our students (those many who do not have a computer of their own) how to use the Internet as a supportive tool in their endeavor to further develop their reading skills.

The center/bank of materials was started up only a year ago and there still are a lot of unsolved issues and things to be done, but the results are very encouraging. At first, there were skeptical voices, and the whole idea, like any change, was seen as unfeasible in terms of logistics and as extravagant in terms of implementation at our department, but we all managed to find the best solutions for the center/bank of materials to be set up to the benefit of both our students and ourselves. It was quite remarkable and finally it turned into a highly challenging, often humbling but always gratifying learning experience.

I am going to give an example of how the center/bank of materials worked last year with some of my third year students, referring to the *Literature and Medicine* section (3). On my return from a congress of History of Medicine held in

Galveston, Texas, in September 2000, I enthusiastically told my students about my new American experience with a focus on my presentation about the Romanian medical context and its importance for the Romanian history of medicine as it could be found in Saul Bellow's "The Dean's December". This starter type discussion was intriguing and sufficient for some of my students to get interested in reading Saul Bellow's novel. Thus a new whole "adventure" started. I had to make copies of some of the chapters of the novel, as there was only one copy of the novel available, so that more students could embark upon reading it. I also asked them to find information, while reading, about the famous Romanian doctor (Saul Bellow's father-in law- in reality) the father of Neurosurgery in Romania - in the novel, about his family in general and about the Romanian medical life as it came out of Saul Bellow's description. I also requested them to submit papers by the end of the term meetings and give presentations about their findings in front of the group. The result was amazing in terms of energy and enthusiasm put into their work but also in terms of accuracy, and final achievement (see Appendix, Student Sample Texts). There was also a lot of positive appreciation on behalf of the other students. Students' selfconfidence was also boosted.

Another example, which can clearly show how effective a center/bank of materials like this can be, is one referring to the *Medicine* section (4) of the center. The students, on their own, consulted the materials, picked an article from BMJ (viz. "Medical students, their electives, and HIV"), which interested them, read it and summarized it. Then consulted the teacher for accuracy. The result can be seen in Appendix, Student Sample Texts).

Thus the teacher's role in this mode of working is that of a "helper". This is challenging and extremely demanding for the teacher as this new role involves extended professional knowledge and skills, the teacher being exposed to a variety of questions and demands too.

Rewarding is a word too shallow to describe the feeling of accomplishment that I had working like this and coordinating students' work in the center/bank of materials.

Having this short but so intense experience in mind, I think that any teaching going on in an institution should be supported, completed and stimulated by a Self-Access Center. This actually brings me to Krishnamurti's wisdom, which says that there is no real education and learning without freedom.

CONCLUSIONS

The partial results of this reading program are really encouraging.

Firstly, having developed a collection of materials, which constitute important tools for classroom work at the department, is a real achievement. The idea that in the end the individual teacher has to handle all the problems regarding materials in his/her classroom is quite a powerful one and at the same time empowering for the teacher. This can also help and enhance the whole teaching/learning process in a more natural and authentic way.

Secondly, I tried to implement the RRT within the teaching process at our department, as I am fascinated with the ways freedom works on us and makes us, humans, grow in what we have best and must learn to cherish: the God within each other. This reminds me, by extrapolation from writing to reading, of Brenda Ueland's (1987) ideas that everybody is talented, original and has something to say – if one speaks from oneself, from the heart – and this is something I wanted my students to know and remember. I wanted them to feel that criticism and teasing are things that kill, while spirit, understanding, being compassionate and respecting the other's ideas are things that give life.

Thirdly, I am also amazed at what lies in the realm of possibility when it comes to working with highly motivated students, as the third year medical students are, who take the optional medical English course on their free own choice. It was absolute joy to see each of my students endeavor to work at

his/her best and develop new freedom of expression. It was so rewarding to witness that while becoming more independent readers my students were practicing language skills at a high level by recycling the new vocabulary and by improving their oral fluency during the class discussions. It was an evident process of gaining self-confidence too that I was witnessing. Through their reading and interpretation of the texts and through class discussions my students began to listen to each other and they became more sensitive to the others' feelings. They seemed to have gained a deeper understanding of themselves, their peers and their lives.

Then referring to the improving reading speed part of the program, though it was not yet fully and rigorously implemented, it was extremely gratifying to see the students being preoccupied by their reading speed and very much aware of its importance in terms of achieving the final aim of any professional reading: reading for information. I have tried to explain the need of such a section in the reading program of the third year medical students and also some of the ways of approaching it in what I consider its most important aspects. I expect my students to understand that becoming better readers involves a lot of individual practice and effort put into it.

As far as the extensive reading and the Self-Access Center/bank of materials are concerned my personal conviction is that enjoying what you read makes you read faster, more and with much better understanding. One of the best ways of improving one's knowledge of a foreign language is to read extensively in it, build a strong reading habit and enjoy the reading. This conviction of mine was strengthened by the last year's experience and in the

implementation of the program in the years to come I shall be the adapt of enhancing students' pleasure while reading. In the long run this will definitely have an impact upon the future of their profession.

Last but not least I would mention the fact that I have shared medical English texts from my selection and introduced them in the Appendix hoping that they might be useful for other teachers who embark upon teaching medical English and who might face a shortage of materials as I have at the beginning of this program.

APPENDIX

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TABLE 5

Session	Text	Prediction (P)	Timed tasks (TT)	Skimming & scanning (SK & SC)	Expressing opinion (EO)	Negotiating meaning (NM)
1	TEXT 1 Blood Vascular System	*				
•	TEXT 8 Coma					*
2	TEXT 1 Blood Vascular System	*				
	TEXT15 Disease in Time and Space				*	
3	Abstracts (collection; see TEXT 4)	*				
Ľ	TEXT 9 Explosion of the sewer					*
4	TEXT 5 Formal medical letters (collection)	*				
	TEXT 16 <u>Hippocratic Oath</u>				*	
5	Case report (collection; see TEXT 3)	*				
	TEXT 10 Operation in the mine					*

TABLE 6

Session	Text	Prediction (P)	Timed tasks (TT)	Skimming & scanning (SK & SC)	Expressing opinion (EO)	Negotiating meaning (NM)
	Abstracts (collection)	*				
6	TEXT 6 Smoking and Cancer		*			
	Medical articles (CANCER) (collection)				*	
	TEXT 5 Formal medical letters (collection)	*				
7	Case report (collection)		*			
	TEXT 11 Resuscitation				:	*
:	Case report (collection)	*				
8	Short medical article (see TEXT 17)		*			
	Medical articles (AIDS) (collection)				*	
	Abstracts (collection)	*				
9	Case report (collection)		*			
	TEXT 2 Philadelphia					*
	Textbook excerpt (see TEXT 1)	*				
10	Case report (collection)		*			
	Case reports (collection; jigsaw reading)				*	

TABLE 7

Session	Text	Prediction (P)	Timed tasks (TT)	Skimming & scanning (SK & SC)	Expressing opinion (EO)	Negotiating meaning (NM)
	Formal medical letters (collection)	*				
	Case report (collection)		*			
11	Case report (see TEXT 7)		•	*		
	TEXT 12 First impressions & opinions (part 1)					*
	Case report (collection)	*				
	Case report (collection)		*			
12	Case report (collection)			*		
	Case reports (jigsaw reading) (collection)				*	
	Formal medical letters (collection)	*				
	Case report (collection)		*			
13	Case report (collection)			*		
	TEXT13 First impressions & opinions (part 2)					*
	Text book excerpt	*				
	Case report (collection)		*			
14	Text book excerpt			*		
	Case report (collection; jigsaw reading)				*	
	Medical article (collection; Gvnecology)	*				
15	Case report (collection)		*			
	Medical articles (collection)			*		
	TEXT14 A Farewell to Arms					*

TEXT 1

THE BLOOD VASCULAR SYSTEM

Speaking generally, the arteries may be said to contain pure, and the veins impure, blood. This is true of the systemic, but not of the pulmonary, vessels, since it has been seen that the impure blood is conveyed from the heart to the lungs by the pulmonary arteries, and the pure blood returned from the lungs to the heart by the pulmonary veins. Arteries, therefore, must be defined as vessels, which convey blood from the heart, and veins as vessels, which return to the heart.

The heart and lungs are contained within the cavity of the thorax, the walls of which afford them protection. The heart lies between the two lungs, and is there enclosed within a membranous bag, the pericardium, while each lung is invested by a serous membrane, the pleura

The cavity of the Thorax

The capacity of the thorax does not correspond with its apparent size externally, because (1) the space enclosed by the lower ribs is occupied by some of the abdominal viscera; and (2) the cavity extends above the first rib into the neck. The size of the cavity of the thorax is constantly varying during life with the movements of the ribs and Diaphragm, and with the degree of distention of the abdominal viscera. From the collapsed state of the lungs, as seen when the thorax is opened, in the dead body, it would appear as if the viscera only partly

filled the cavity of the thorax, but during life there is no vacant space, that which is seen after death being filled up by the expanded lungs.

The Pericardium

The pericardium is a conical membranous sack in which the heart and the commencement of the great vessels are contained. It is placed behind the sternum and cartilages of the third, fourth, fifth, sixth and seventh ribs of the left side, in the interval between the pleurae.

Its apex is directed upward and surrounds the great vessels about two inches of their origin from the base of the heart. Its base it is attached to the central tendon and to the left part of the adjoining muscular structure of the diaphragm. In front it is separated from the sternum by the remains of the thymus gland above and a little loose areolar tissue below, and is covered by the margins of the lungs, especially the left. Behind, it rests upon the bronchi, the esophagus and the descending aorta. Laterally, it is covered by the pleurae, and is in relation to the inner surface of the lungs; the phrenic nerve with its accompanying vessels descends between the pericardium and pleura on either side.

Structure of the pericardium

The pericardium is a fibro-serous membrane and consists, therefore of two layers, and external fibrous and an internal serous.

The Heart

The heart is a hollow muscular organ of a conical form, placed between the lungs, and enclosed in the cavity of the pericardium.

Position

The heart is placed obliquely in the chest: the brad attached end, or base, is directed upward, backward and to the right, and corresponds with the dorsal vertebrae, from the fifth to the eighth inclusive; the apex is directed downward, forward, and to the left, and corresponds to the space between the cartilages of the fifth and sixth ribs, three quarters of an inch to the inner side, and an inch and a half below the left nipple, or about three and a half inches from the middle line of the sternum. The heart is placed behind the two lower two-thirds of the sternum and projects farther into the left, then into the right half of the cavity of the chest, extending from the medium line, about three inches in the former direction, and only one and a half in the latter; about one third of the heart lies to the right and two thirds to the left of the medial plane. The anterior surface of the heart is round and convex, directed upward and forward and formed chiefly by the right auricle and ventricle, together with a small part of the left ventricle. It's posterior surface which looks downward rather than backward, is flattened and rests upon the diaphragm and is formed chiefly by the left ventricle. The right or lower border is long, thin and sharp; the left or upper border is short but thick and round.

Size

The heart, in the adult measures five inches in length, three inches and a half in breadth in the broadest part, and two inches and a half in thickness. The

prevalent weight in the male varies from ten to twelve ounces; in the female, from eight to ten. Its proportion to the body being as 1 to 169 in males; 1 to 149 in females. The heart continues increasing in weight and also in length, breadth and thickness up to an advanced period of life; this increase is more marked in men than in women.

Component parts

As has already been stated the heart is subdivided by a muscular septum into two lateral halves, which are named respectively right and left; and a transverse constriction subdivides each half of the organ into two cavities, the upper cavity on each side being called the auricle, the lower the ventricle. The course of the blood through the heart cavities and blood vessels has already been described. The division of the heart into four cavities is indicated by grooves upon its surface. The groove separating the auricles from the ventricles is called the auriculo-ventricular groove. It is deficient in front, where it is crossed by the root of the pulmonary artery. It contains the trunks of the nutrient vessels of the heart. The auricular portion occupies the base of the heart, and is subdivided into two cavities by a medium septum. The two ventricles are also separated into a right and left by two furrows, the interventricular grooves, which are situated one on the anterior, the other on the posterior surface; these extend from the base of the ventricular portion to near the apex of the organ, the former being situated nearer to the left border of the heart and the latter to the right. It follows therefore, that the right ventricle forms the greater portion of the anterior surface of the heart, and the left ventricle more of its posterior surface.

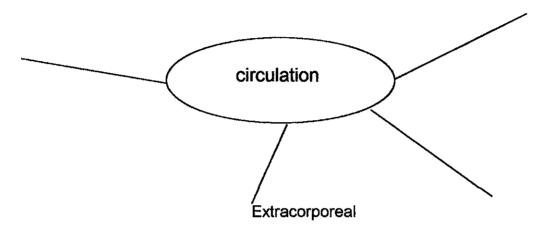
Word study

I. Match the definition to the word combination given in the left column of the following table. The first has been done for you.

Word combination	Definition
Aerated blood/ arterial blood	1
Central blood	
Defibrinated blood	
Occult blood	
Peripheral blood	
Venous blood	
Whole blood	

- 1.... = that which carries oxygen to the tissues through the systemic arteries.
 - 2.... = that from which none of the elements has been removed.
- 3.... = blood from the pulmonary venous system; sometimes applied to blood obtained from the chambers of the heart or from bone marrow
- 4.... = blood that has given up its oxygen to the tissues and is carrying carbon dioxide back through the systemic veins, to be exchanged in the lungs.
 - 5.... = blood incapable of clotting because the fibrin has been removed.

- 6.... = that circulating through vessels remote from the heart.
- 7.... = that which has escaped from tissues in such small amounts as to be detectible only by chemical tests
- II. Complete the mind map, and then match the definitions to the obtained word combinations:



Definitions:

- Circulation of blood outside the body, as through an artificial
 kidney or a heart-lung apparatus =?
 - 2. Pulmonary circulation (opposite: greater/systemic circulation) =?
- 3. The flow of blood from the right ventricle through the pulmonary artery to the lungs, where carbon dioxide is exchanged for oxygen, and back through the pulmonary vein to the left atrium =?
- 4. The flow of blood from the left ventricle through the aorta carrying oxygen and nutrient material to all the tissues of the body, and returning through the superior and inferior venae to the right atrium =?
- III. Do you know any of these idiomatic phrases in which HEART is involved? Take turns with your partner in explaining them. If you cannot you may

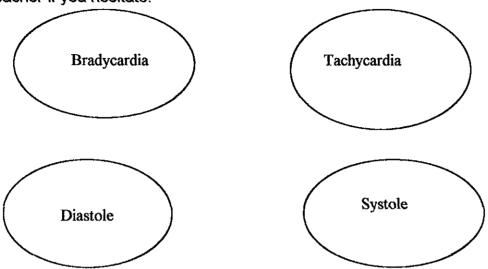
use the dictionary to get their meaning clear. Then imagine and write down a story (of 100-120 words) about the heart - surgeon Radu Calasiu whose family had a terrible accident, who had a very difficult case to operate on and yet...

break one's heart, lose one's heart, set one's heart on doing sth., take sth to heart, have one's heart in one's mouth, have one's heart in one's boots, get/learn/know sth. by heart

IV. Work with your partner on the pronunciation of the words in the following chart and complete the missing definitions: If you cannot, you may use a medical dictionary:

Word compounds of cardio-	Definition
cardianeuria	deficiency of tone in the heart
cardiataxia	
cardiectasis	
cardioclasis	rupture of the heart
cardiodynia	pain in the region of the heart
cardiography	
cardiologist	
cardiology	
cardioptosis	downward displacement of the heart
carditis	

V. Mind the pronunciation of the following words. Check it with your teacher if you hesitate:



Exercises:

- A. Answer the following questions:
- 1. What kind of blood do the arteries contain? (in the systemic and pulmonary circulations)
- 2. What kind of blood do the veins contain? (in the systemic and pulmonary circulations)
- 3. Why doesn't the capacity of the cavity of the thorax correspond with its apparent size?
 - 4. What is the pericardium?
 - 5. What is the heart?
 - 6. What is the position of the heart?
 - 7. What are the component parts of the heart?
- B. Read this anatomical description and fill in the gaps with the appropriate words:

The heart is a hollow ...(1) that pumps BLOOD through the blood ...(2)...... In all parts of the body at the ...(3)...... of about 4,000 gallons a day (or 5 ounces at each ...(4) About the size and shape of a clenched...(5), it is located in the...(6)..... between the lungs, just ...(7) the diaphragm. It is in the middle of the ...(8), with its apex directed slightly to the...(9)......side.

The heart is a...(10)-chambered, double-acting...(11)...... A septum down the middle separates it into a...(12) and "left" heart. It has five ...(13)....., which control the flow of...(14)...... The heart muscle is nourished by (15)...... called coronary arteries.

Each side of the ...(16)....... is subdivided into two ...(17)......, separated by valves. The upper chambers are called...(18)......(or atria), the lower chambers ...(19)........ The left ventricle is the...(20)........

C. Scan the following text and write down its organization. Then write down five key words to each section of the text.

Diseases of the cardiovascular system:

Tetralogy of Fallot

An adage of the past stated that if one saw a cyanotic child (not infant) one could diagnose tetralogy of Fallot without an examination and be right 90% of the time. This percentage reflected undue optimism and was inadequate for precise specialty practice in any case. This citation does serve the purpose of emphasizing the frequency of the defects that are termed "tetralogy" but that are

recognized now not only to have wide anatomic variation but also to present a varied physiologic picture. The historic clinical picture of a child cannot be accurately reconstructed from postmortem examination of the heart alone.

Although cyanosis is traditional and characteristic, it may be mild, and persons with pulmonary stenosis and ventricular septal defect may indeed have a left-to-right shunt at the ventricular level. An occasional infant with tetralogy is well nourished and has a normal rosy color when first seen, yet has the history of severe cyanotic episodes with unconsciousness.

Morphology. - The term "tetralogy of Fallot" has had such traditional international use that it will probably not be readily discarded, despite invalidity of a true tetrad of Fallot's proprietary right to an eponym. Classically, the four abnormalities were pulmonary stenosis, ventricular septal defect, dextroposition of the aorta and right ventricular hypertrophy. The latter two conditions are entirely secondary to the first two abnormalities.

Clinical manifestations. - The typical clinical picture of tetralogy is that of cyanosis, a short systolic murmur of the stenotic "ejection' type, right ventricular hypertrophy as indicated by the roentgenogram and the electrocardiogram, and oligemic lungs as evidenced by the roentgenogram. The roentgenogram May also reveal a suggestion of a small main pulmonary artery, The intensity and duration of the murmur vary inversely with the severity of the stenosis, the reverse of the relationship when the ventricular septum is intact. The second sound is single and loud over a large area of the precordium. When the second sound is particularly intense to the left of the upper sternum, however, one should suspect the possibility of an anteriorly placed aorta.

The general development of the child and the degree of cyanosis and polycythemia will reflect the inadequacy if the pulmonary blood flow, which may be further quantitatively revealed by the level of the arterial oxygen saturation at rest and during exercise.

In the typical patient, surgical therapy might be scheduled without cardiac catheterization or angiography.

Treatment. - Complete surgical reconstruction has been satisfactory at acceptable mortality risks (3% to 15%) in children and adults, but in small infants in dire need of help there still remains a place for anastomotic operations diverting some aortic flow into the pulmonary arteries. The very long-term results of complete reconstruction are yet to be evaluated, but it is expected that seemingly brilliant successes achieved so far will not be significantly altered by the passage of time. Some pulmonary incompetence, often difficult to recognize clinically and frequently the necessary byproduct of complete relief of the stenosis, may constitute a handicap in some patients over many years, though it is not of apparent significance at this time.

KEY to I.: 1. aerated blood, 2. whole blood, 3.central blood, 4.venous blood, 5.defibrinated blood, 6. peripheral blood, 7.occult blood

KEY to II.: 1. extracorporeal circulation, 2.lesser circulation, 3.pulmonary circulation, 4. systemic circulation

KEY to IV.:

cardiataxia = incoordination of heart movement

cardiectasis = dilatation of the heart

cardiography = the graphic recording of a physical or functional aspect of the heart

cardiologist = a specialist in the study and treatment of heart disease cardiology = study of the heart and its functions carditis = inflammation of the heart

Key to: Exercise B

1.	muscle	11.	pump
2.	vessels	12.	right
3.	rate	13.	valves
4.	beat	14.	blood
5.	fist	15.	arteries
6.	chest	16.	heart
7.	above	17.	chambers
8.	body	18.	auricles
9.	left	19.	ventricles
10.	four	20.	largest

TEXT 2 PHILADEPHIA by Christopher Davies

Andrew looked around the room. This was the AIDS that was rarely seen in the press. No shrill demonstrations, no grim body counts, no hysterical accusations of murder, just a group of men and women fighting a disease and at the same time trying to maintain their normal lives as much as possible. For a few minutes, Andrew just listened to the conversation around him. A healthy-looking woman, Susan, was talking to a not-so-healthy-looking man, Rick, about weight, a topic of major concern among all AIDS patients.

"So how much weight have you lost?" Susan asked.

"Fifty pounds!" Rick said. It did not seem to bother him as much as it should. His face was terribly gaunt, and he did not look as though there was much more weight he could lose. "Can you believe it? I'm disappearing. The other day my sons and I were in a restaurant and when I ordered coffee the waiter asked me if I wanted sugar or Sweet'n Low. I said, "Do I look like I should be on a diet?"

"My God!" Susan said, rolling her eyes. She still looked healthy and robust.

"Then my oldest boy says, 'Dad, when did you start losing all that weight?"

"Does your son know you've got HIV?" Susan asked.

"Yeah, I told both my sons." Rick was silent for a moment, thinking fondly of his boys. "You know," he said, "their reaction was interesting. My oldest seemed really involved intellectually, you know, trying to understand the disease and all, but my youngest didn't want to deal with it. But they are both really great, real champs, you know."

(From Davies, C, Philadelphia, Penguin Books, 1993, pp. 14-15).

Pre-reading:

I. Listening for specific information.

As you watch the videocassette "Myth and Reality", listen to what you are explained and find out one element about each of the items in the table below and fill in the table.

Treatment:	
Cause:	
Way of contamination:	

- 2. Compare notes with your partner.
- 3. Draw a mind-map for AIDS.
- 4. Compare map with your partner.
- 5. Fill in the blanks with the following words: pneumonia, stress, down, worth, boring, severe.

Like most of the patients there, Andrew had full-blown AIDS, as it is often called to distinguish it from merely being infected with the HIV virus. He had had pneumocystis cariniialmost a year ago and now he had KS plus some other less problems. Doctor Gillman had repeatedly asked him to slow down, had told him that....was bad for him. But slowing was not something that Andrew understood and he thought that a life without some stress would be awfullyand probably notliving.

While-reading

Read the text carefully and find positive and negative connotation adjectives and put them into two columns

positive connotation adjectives	negative connotation adjectives

Post-reading

- Discuss with your partner and point out if there was anything striking for you in the text. Prepare report to class.
 - 2. Continue the sentences:
 - e.g. The waiter asked me if I wanted sugar.

The doctor asked me if...

My doctor asked me if....

I asked him if...

The nurse wanted to know if...

The student asked if....

- 3. Role-play: Provide the dialogue Doctor-Patient
 - A (Doctor announcing his patient that he is sero-positive):

B (Patient)

5. Write a short paragraph (I5o words) on the idea: What would you do if you found out your friend had AIDS?

CASE REPORT / CASE HISTORY

A gentleman of the road was admitted to hospital in a state of confusion.

He had been doubly incontinent and two partially drunk bottles of wine were found in one of the three overcoats that he was wearing. There was no history available.

On examination he was agitated and disorientated, with a lowered level of consciousness. Blood pressure measured 140/80 mmHg, pulse 100/min, sinus rhythm, temperature 38° C. There was no evidence of head injury. There were several spider naevi over his upper trunk and the liver was moderately enlarged with a smooth surface.

Investigations: Hb 13.0 g/dl, WBC 7 x 10 to the ninth /l, platelets 190×10 to the ninth/l, urea 10 mmol/l, sodium 13 mmol/l, potassium 3.8 mmol/l, urinalysis normal, chest and skull X-ray normal.

A diagnosis of delirium tremens was made and a chlormethiazole infusion was set up. After a period of 24 hours it was decided that the patient's conscious level was too greatly suppressed by the chlormethiazole, which was therefore stopped. Surprisingly the level of consciousness did not improve and the patient entered a deeply comatose condition before death.

Discussion:

What conditions should have been excluded?
 The most important diagnosis to exclude is meningitis. This patient with

confusion, altered state of consciousness and a pyrexia with no obvious focus of infection, should have been suspected of having meningitis.

2. What simple investigation was mandatory in this case?

In this case, where no evidence of trauma existed and there were no focal neurological signs, a lumbar puncture was mandatory and would have made the correct diagnosis of pyogenic meningitis.

The treatment should consist of an adequate antibacterial regime covering all the likely pathogenic organisms. Urgent microscopy of the CSF may indicate the likely pathogen but in the absence of the definitive diagnosis and in someone who is extremely ill, broad spectrum high dosage antibiotic cover should be administered immediately. The CSF culture will confirm the organism and may be available after 24 hours. Benzyl penicillin and chloramphenicol may be employed, but cefotaxime is currently an acceptable alternative. All should be given intravenously in adequate dosages. These may be altered in the light of the full microbiolocal information obtained subsequently from culture and sensitivity testing of the organism. Typical CSF findings would be a lowered glucose level and the presence of polymorphonuclear leucocytes with or without the observation of organisms on Gram staining.

This man was at particular risk of contracting an infection, having alcoholic liver disease. His poor social circumstances should have made the physician especially aware of the possibility of Mycrobacterial tuberculosis, which may also cause severe meningitis.

3. How would you have treated this patient?

Case Report / Case history

SHEET

SURNAME		FIRST NAME
AGE:	SEX:	MARITAL STATUS:
OCCUPATION:		
PRESENT COI	MPLAINT	
O/E		
ENT		
RS		
CVS		
GIS		
GUS ´		
CNS		
IMMEDIATE PA	AST HISTORY	
POINTS OF NO	OTE	•••
INVESTIGATIO	ONS	
DIAGNOSIS		_
MANAGEMEN ⁻	Γ	

ABSTRACTS

STRUCTURED ABSTRACT

UNSTRUCTURED ABSTRACT

Objective: to evaluate if human endometrium presents morphological variations suggestive of an age-related decline in endometrial receptivity. Study design: peri-implantation endometrium of younger (<30 years of age: n=13) and older (>40 years of age: n=17) normally menstruating women was studied. Endometrial specimens were routinely fixed in buffered formalin and embedded in paraffin. Sections (5 µm) were stained with hematoxylin-eosin, periodic acid-Schiff (PAS), and Trichrome conforming to Masson according to conventional histologic examination. Several consecutive sections were used for the following immunohistochemical study: vascular localization (CD34), cellular proliferation index (PCNA), progesterone and estrogen receptors. Results: using both the traditional morphological evaluation and monoclonal antibodies, no significant differences were found between the endometria of women <30 years of age and those of women >40. Conclusions: our results suggest that human endometrium does not age, at

Campylobacter jejuni is the most frequently identified cause of aastroenteritis in the UK, and commonly precedes Guillain-Barre Syndrome (GBS). There is some evidence that the resultant neurological disease may be a more severe variant of GBS with predominant axonal degeneration. Crossreactivity between neural antigens and C. jejuni may be one of the mechanisms by which GBS is triggered. Unraveling the immunopathogenesis of GBBS following C. iejuni enteritis may shed light on the way in which bacterial infections induce autoimmune disease.

From Quarterly Journal of Medicine, 1993, 86 pp. 623-634

From European Journal of Obstetrics & Gynaecology and Reproductive Biology, 1995, 63 pp 181-185

least while cyclic hormonal stimulation

and menstruation are present.

From English and Pharmacy, Bucharest: Cavallioti Publishing House & The British Council 2000 p. 121

LETTERS (MEDICAL FORMAL)

Requesting information

Department of Psychiatry, Fukuoka University, Nanakuma 34, Nishi-ku, Tokyo, Japan. 23rd July 1999

The Secretary,
Royal Edinburgh Hospital,
Morningside Place,
EDINBURGH EH 10.

Dear Sir/Madam,

Would you kindly send me details of the forthcoming International

Conference on Adolescent Psychiatry to be held at the Royal Edinburgh Hospital
in June 2000?

Yours faithfully,

Akiko Nishikawa, M. D.

Application for Study

Department of Oncology, Beijing Medical College, Beijing, Republic of China.

September 4, 1999

The Secretary,
Department of Radiology,
University of Leeds,
Woodhouse Lane,
Leeds, LS 1,
ENGLAND

Dear Sir or Madam,

I would be grateful if you could send me information about postgraduate study in the Department of Radiology. I am a Chinese doctor with a medical degree from the University of Shanghai, and with 9 years' clinical experience at a city hospital, including work in the Department of Radiology.

I should be grateful for your advice on the facilities for M. Phil. or PH. D. study in your department, and , if my application proves to be successful, when might be a suitable time to come to England?

Yours faithfully,
Wang Lung-yin (Dr.)

Subscribing to a Journal

Division of Sexually
Transmitted Diseases,
Clinical Research Center,
Xiao, China

December 8, 2000.

Subscription Manager,
British Medical Journal,
BMA House,
Tavistock Square,
London WC1H 9JR

Dear Sir,

I would like to take out a subscription to the British medical Journal. Would you send me the appropriate details?

Yours faithfully,

Wang Ping, M. D.

Letter of Acknowledgement

16, Rue de Descartes,Monmartre,Paris.

August 10, 2000

Professor Shuzo Yamamoto, Institute of Dermatology, University of Newcastle, Blaydon St., Newcastle, ENGLAND

Dear Professor Yamamoto,

Thank you very much for accepting me for your summer course in dermatology. I heard yesterday from my superiors that they are willing to sponsor me. I shall be arriving in Newcastle on June 28th 2001 and will contact your department directly.

Yours sincerely,

Sylvie Martin, M. D.

Letter of Welcome

July 15, 1999

Professor Jinda Napapon
Dept. of Pathology
Chiang Mai Medical College
Chiang Mai,
Thailand

Dear Professor Napapon,

We are delighted that you are able to join us here in Michigan.

I have contacted the University Accommodation Officer who will be writing to you in the immediate future. It is likely that you will be staying in the North University apartment complex. We need to know immediately whether you will be accompanied by your husband and children. Also, will you need any help with your visa?

I look forward to your visit and to hearing about the work, which you are doing in Chiang Mai.

Yours sincerely,

Brian Rolyan M. D., Ph. D.

Letter of Introduction

Department of Public Health School of Medicine, University of Queensland, South Brisbane 4101, Australia.

January 5th, 1999

The Medical Library, University of Wisconsin, Madison, W1 53706, U. S. A.

Dear Sir or Madam,

Mr. John Sasagawa who brings this letter to you is a graduate student in the School of Medicine, at the University of Queensland. He intends to spend a few days in Madison and would like to take the opportunity of visiting your library. I would appreciate it if you would give him your cooperation.

Yours faithfully,

Utako Stevenson, MD

Professor and Chairperson

Department of Public Health

Letter of Introduction

University College, London
7 The Maltings
Gower Place
London WC1 2E

July 5 2000

Professor William Halstead

Department of Social Psychiatry

University of New South Wales

Arlington, Australia

Dear Bill,

It was good to see you again last April in Paris. Hope you managed to get all your shopping done before you left for Rome.

By now you will have met Alan Kim. He has been working in our lab for about 3 years now and I commend him to you as a very hard-working and reliable young man. His elder sister, by the way, is Nancy Kim the well-known child psychologist. You will have received further details about Alan in the CV, which he sent earlier. I am sure he will be an asset to your laboratory during the short time that he will be with you.

Look forward to seeing you - at the London conference perhaps?

Best wishes.

Adrian Bolland

Letter of Reference

Department of Psychiatry Baylor College of Medicine 1 Baylor Plaza Houston, TX 77030 U.S.A.

August 5, 2000

The Simon Medical Foundation University of Karachi P. O. Box 8403 Karachi – 32 PAKISTAN

Re: Timothy Sands
Assistant Professor
Baylor College of Medicine

Dear Professor Quarani,

Thank you for your letter of July 1st in which you requested a brief reference regarding <u>Professor Sands</u>. I am happy to commend him to your University.

During the time of his appointment in the Department of Psychiatry (1995 -) he has been a stimulating and valuable member of the team. His clinical skills in Psychiatry were soon evident from the moment of his inception in university hospital. After a year's fellowship in psychiatry in Edinburgh his skills in psychiatry combined made him the obvious person to assume the newly created combined post of clinical psychiatrist and Director of Young Persons' Unit in 1997. He soon built up a local and regional service in adolescent psychiatry, while taking his full share in the clinical practice of general psychiatry.

In spite of a severe illness in 1998, from which he has now recovered, his strength of character truly showed itself, and his colleagues have been impressed at his cheerful uncomplaining persistence in adversity. He is a hardworking and reliable member of this university whom I have no difficulty in recommending to you.

Yours sincerely,

David Reece, MD, PhD. Professor and Chairman Department of Psychiatry **Letter of Thanks for Hospitality**

University Department of

Medicine

Glasgow Royal Infirmary

Glasgow G40SF

Scotland

5. 9. 99

First Department of Orthopedics
Athens University
Athens 115 27
Greece

Dear Dr. Messaritakis,

On behalf of my colleagues and myself I would like to extend my thanks to you and your staff during our recent visit to your department. We were greatly impressed by all that we saw and enjoyed our discussions with you during our too brief stay.

It would be a great pleasure to show you our facilities here in Glasgow. Should you or any of your colleagues have the occasion to visit Scotland we would be delighted to show you our new orthopedics unit.

Once again, thank you for your gracious hospitality.

Yours sincerely,

Eric Glynn

Professor of Orthopedics

Visiting a Hospital

McGill University

Department of Surgery

Montreal

Quebec 7000

Canada

Telephone: (23) 345876

January 22, 1998

Dr. Thomas Kilroy
Birmingham Maternity Hospital
Birmingham B15 2TB
ENGLAND

Dear Dr. Kilroy,

I am arranging a visit to England to discuss research topics in the area of congenital heart disease. I was most interested in your paper on the genetic epidemiology of congenital heart disease. Here at McGill we have just completed a study of the risks to the offspring of parents operated upon for cardiovascular malformations.

I would be very glad to receive any further information on your Birmingham study, and, if it is convenient, I would like to arrange a visit to your unit.

Yours sincerely,

Jeanne D'Artaud

Professor of Surgery

SMOKING AND CANCER

Americans smoke six thousand million cigarettes very year. This is roughly the equivalent of 4,195 cigarettes a year for every person in the country of 18 years of age or more. It is estimated that 51% of American men smoke compared with 34 % of American women.

Since 1939 numerous scientific studies have been conducted to determine whether smoking is a health hazard. The trend of evidence has been consistent and indicates that there is a serious health risk Research teams have conducted studies that show beyond all reasonable doubt that tobacco smoking, particularly cigarette smoking is associated with a shortened life expectancy.

Cigarette smoking is believed by most research workers in this field to be an important factor in the development of cancer of the lungs and cancer of the throat and is believed to be related to cancer of the bladder and the oral cavity. Male cigarette smokers have a higher death rate from heart disease than nonsmoking males. (Female smokers are thought to be less affected because they do not breathe in the smoke so deeply.) the majority of the physicians and researchers consider these relationships proved to their satisfaction and say, "Give up smoking. If you don't smoke don't start!" Some competent physicians and research workers- though their small number is dwindling even further- are less sure of the effect of cigarette smoking on health. They consider the increase in respiratory diseases and various forms of cancer may possibly be explained by

other factors in the complex human environment- atmospheric pollution, increased nervous stress, chemical substances in processed food, or chemical pesticides that are now being used by farmers in vast quantities to destroy insects and small animals. Smokers who develop cancer or lung diseases, they say, may also, by coincidence live in industrial areas or eat more canned food. Gradually, however, research is isolating all other possible factors and proving them to be statistically irrelevant.

Apart from statistics it might be helpful to look at what smoking tobacco actually does to the human body. Smoke is a mixture of gases, vaporized chemicals, minute particles of ash and other solids. There is also nicotine, which is a powerful poison and black tar. As the smoke is breathed in all components form deposits on the membranes of the lungs. One point of concentration is where the air tube, or bronchus, divides. Most lung cancer begins at this point.

Smoking also affects the heart and the blood vessels. It is known to be related to Beurger's disease, a narrowing of the small veins in the hands and feet that can cause great pain and leads even to amputation of limbs. Smokers often die more often from heart disease.

While all smoking affects life expectancy and health, cigarette smoking appears to have a much greater effect than cigar or pipe smoking. However, nicotine consumption is not diminished by the latter forms, and current-research indicates a causal relationship between all forms of smoking and cancer of the mouth and throat. Filters and low tar tobacco are claimed to make smoking to some extent safer, but they can only marginally reduce not eliminate the hazards. (From Mosback, G&Mosback, V, Practical Faster Reading, Cambridge:CUP, 1976)

Comprehension

Decide whether the following statements are true or false according to the information given in the passage. Put a T for True or an F for False in the appropriate box:

Question	True (T) or
1. According to the figures in the article there are twice as many men	False (F)
smokers as women in Greece.	
In 1959, scientific studies proved smoking causes fatal diseases.	
3. In spite of consistent evidence that smoking is most probably a	
serious health risk scientists are still not in a position to prove	
absolutely that it actually causes life-shortening diseases.	
Some research workers in the field of smoking and disease do not	
believe smoking to be necessarily an important factor in the	
development of cancer of the lungs and larynx.	: :
5. Female smokers are probably less affected by heart disease	
because they inhale the smoke less deeply.	
6. A small number of physicians and research smokers think that the	
increase in respiratory diseases and various forms of cancer may be	
caused by other factors in the complex human environment.	
7. One of the major difficulties of research into human health	
problems is the difficulty of isolating particular individual factors from the	
complex human environment.	
8. Tobacco smoke is a mixture of two poisonous gases.	
9. Since the elements of tobacco smoke are deposited in large	
amounts at the point where the bronchus divides and since this is the	
point where most lung cancer starts we can logically conclude that	
tobacco smoking is definitely the cause of lung cancer.	
10. Cigar and pipe smokers consume marginally less nicotine than	
cigarette smokers.	ļ

SCANNING A CASE HISTORY

Find and underline this information about the patient as quickly as you can. Number the information in the margin.

- 1. Age
- 2. Symptoms at the onset if his present illness
- 3. State when found by his landlady
- 4. Why he consulted his GP five years earlier
- 5. Significant findings on that occasion
- 6. Diagnosis made when referred to hospital
- 7. Health over the last five years
- 8. Alcohol consumption

A 63-year old bachelor who worked as a bank clerk developed symptoms similar to those which had affected several of his colleagues who had been diagnosed as influenza. He felt feverish, had a running nose, aches in his muscles and generalized malaise. He therefore stayed off work in his bed-sitting room. After 48 hours the landlady noticed that the milk on doorstep had not been taken in for previous two days, and also that his cat had not been fed. On entering his room she found him confused and delirious. She called a doctor, who immediately had him admitted to hospital.

The only significant history was that five years previously, when he last consulted his general practitioner because his bleeding hemorrhoids, a routine blood count had been performed which showed Hb 12.6 g/dl with normal film, and white count 21,000 /mm3, 90 per cent of which were lymphocytes. At that stage hie was referred to hospital, where it was found that he had some enlarged lymph node in both sides of the neck and both the axillae, and that the spleen tip was palpable. Chronic lymphatic leukemia was diagnosed. The patient was kept under six monthly follow-up, with no change in the signs or blood picture. He had remained asymptomatic throughout the five years period.

In the personal history, his weight had been steady and bowels were now less troublesome since he had taken bran each morning, which had a good effect. He smocked 30 cigarettes a day but only drank moderately.

(From Glendinning, E. and Holmström, B., <u>English in Medicine</u>, Cambridge: Cambridge University Press, 1987, p.14)

COMA

by Robin Cook

Author's Note

This novel was conceived as an entertainment, but it is not science fiction. Its implications are scary because they are possible, perhaps even probable.

Consider a classified advertisement that appeared in the San Gabriel (Calif.)

Tribune, May 9, 1968, col. 4:

NEED A TRANSPLANT?

Man will sell any portion of body for financial remuneration to person needing an operation. Write box 1211-630, Covina.

The advertiser did not specify what organ or organs, even whose body they were to come from.

And there have been other advertisements, many others, in various newspapers across the country. Even specific offers of the hearts from living people!

As gruesome as these ads sound, they should come as no great surprise.

There are plenty of precedents for the market economy in medicine. Blood-which may be considered as an organ – is routinely bought and sold. There is a commerce in semen, which, while not an organ, is the product of an organ.

Other organs have been bought and sold. In the 1930', a rich Italian man bought a testis from a young Neapolitan and had it transplanted into himself. (He

not only wanted the product but he wanted to be a distributor as well.) In the last few years there have been episodes where families have declined to give their own kidneys to dying relatives and have sought out and paid volunteer donors. Such cases have not been common, but they have occurred.

The larger problem, the danger, arises from the simple matter of scarcity. There are thousands of people waiting for kidneys and corneas today. The reason that these two organs are particularly coveted is because they have most frequently been transplanted successfully. Thank to dialysis machines potential kidney recipients (some of them... others are left to die because of shortages of dialysis machines, personnel, and funds) can be kept alive, but their lives are far from normal. In many situations they border on the desperate, so much so that kidney dialysis centers have reported a so-called "Holiday Syndrome." What tat means is that when a holiday weekend approaches, the patients' spirits rise as they anticipate the rush of auto accidents and the victims who may supply the eagerly awaited and desperately needed organs.

The tragedy in this situation is that the solution to the problem is already within our grasp;. Medical technology have advanced to the point where approximately seven per cent of all cadaver kidneys are suitable for transplant (and the figure is much higher for corneas), if they are taken from the donor body within an hour of death. But instead of being put to this noble use,, these organs are regularly delivered to the worms or to the fires of the crematorium because of legal mumbo jumbo whose origins lie in the dark ages of English law. For back in those times corpse s came under the jurisdiction of the ecclesiastical rather than the civil law. It seems inconceivable that such a legacy should limit our lives

today. But it does.

However, most, if not all, states have now passed the Uniform Anatomical Gift Act. This law has helped to provide cadavers for medical schools (whose supply was already adequate), but it has not helped in rectifying the sad need for useful "live" organs for transplant purposes. An alternate approach, by which all cadaver organs would be immediately available for salvage unless the deceased or the next of kin had made prior refusal, has been proposed. But alas, the wheels of change turn agonizingly slowly, and potential recipients are allowed to die while organs are wasted in the ground. Hard questions remain to be answered: such as an acceptable definition of death and the legal rights of an individual after death. But such difficulties should not preclude a solution to the egregiously wasteful practice of discarding valuable human resources.

The problem of organ scarcity for transplantation represents only one flagrant example of the failure of society in general and medicine in particular to anticipate the social, legal, and ethical ramifications of a technological innovation. For some inexplicable reason, society waits to the very end before creating appropriate policy to pick up the pieces and make sense out of chaos. And in the instance of transplantation, failures to recognize mounting problems and enact appropriate solutions will certainly open Pandora's box with its countless unconscionable possibilities: the Stark et al. of my fiction suggest only possible, execrable aberrations.

Who these readers who are interested in delving into the complex problems of organs for transplantation, I recommend two excellent articles which are delightfully illuminating, despite that fact that they appeared in law journals.

This is not to cast aspersions on law journals, but rather to emphasize that the lay individual will find these articles very readable: J. Dukeminier, "Supplying Organs for Transplantation," Michigan Law Review, vol. 68 (April 1970), pp 811-866; D. Sanders and J. Dukeminier, "Medical Advance and Legal Lag: Hemodialysis and Kidney Transplantation," UCLA Law Review, vol. 15 (1968), pp. 357-413.

For those who are interested in medical policy and its phlegmatic character, combine with some positive suggestions for future change, I recommend: J. Katz and M. Capron, Catastrophic Diseases: Who Decides What? Russell Sage Foundation, 1975. This is an excellent, thought-provoking book, probably years ahead of its time. Its only drawback is that not enough people in positions of power in medicine will read it.

A final word about the women in medicine: I must admit that the research I did on the subject (there is not much available) caused me to alter my opinions. I now have a heightened regard for female physicians and female medical students. I recognize that their training experiences are much more difficult and stressful than those of their male counterparts. Things are getting better in this respect, but a snail's pace. The article I found the most illuminating is: M. Notman and C. Nadelson, Medicine: Career Conflict for Woman," American Journal of Psychiatry, vol. 130 (October 1973), pp. 1123-1126.

Robin Cook, M.D.

August 1976

THE EXPLOSION OF THE SEWER From THE CITADEL by A. J. CRONIN

Note: Archibald Joseph Cronin, born in 1896, gave up medicine for literature in 1930 and almost instantly became one of England's most popular novelists. Among his best-sellers are <u>Hatter's Castle</u> (1931), <u>The Citadel</u> (1937), and The Keys to the Kingdom (1941).

Andrew Manson walked slowly up the street towards Philip Denny's lodgings, realizing once again how his orderly conception of the practice of medicine was toppling about him. He knew himself to be raw, inadequately trained, quite capable of making mistakes through his inexperience.

Unconsciously Andrew's thoughts returned to Denny, who never failed in his derision towards this profession to which they belonged. Denny at first had aggravated him intensely by his weary contention that all over Britain there were thousands of incompetent doctors distinguished for nothing but their sheer stupidity and an acquired capacity for bluffing their patients. Now he began to question if there were not some truth in what Denny said. He determined to reopen the argument this afternoon.

But when he entered Denny's room, he saw immediately that the occasion was not one for academic discussion. Philip received him in morose silence with a gloomy eye and a darkened forehead.

Then, after a moment, he said: "Young Jones died this morning at seven

o'clock. Perforation!" He spoke quietly, with a still, cold fury. "And I have two new enterics in Ystrad Row."

Andrew dropped his eyes, sympathizing, yet hardly knowing what to say.

"Don't look so smug about it," Denny went on bitterly. "It's sweet for you to see my cases go wrong and yours recover. But it won't be so pretty when that cursed sewer leaks your way."

"No, no! Honestly, I'm sorry," Andrew said impulsively. "We'll have to do something about it. We must write to the Ministry of Health." "We could write a dozen letters," Philip answered, with grim restraint. "And all we'd get would be a doddering commissioner down here in six months' time. No! I've thought it all out. There's only one way to make them build a new sewer."

"How?"

"Blow up the old one!"

For a second Andrew wondered if Denny had taken leave of his senses.

Then he perceived something of the other's hard intention. He stared at him in consternation.

Manson muttered: "There'll be a heap of trouble – if it's found out." Denny glanced up arrogantly.

"You needn't come in with me, if you don't want to."

Oh, I'm coming in with you", Andrew answered slowly. "But God-only knows why!"

All that afternoon Manson went about his work fretfully regretting the promise he had given. He was a madman, this Denny, who would, sooner or later, involve him in serious trouble. It was a dreadful thing that he now proposed,

a breach of the law which, if discovered, would bring them into the police court and might even cause them to be scored off the Medical Register. A tremor of sheer horror passed over Andrew at the thought of his beautiful career, stretching so shiningly before him, suddenly cut short, ruined. He cursed Philip violently, swore inwardly, a dozen times, that he would not go.

Yet, for some strange and complex reason, he would not, could not draw back.

At eleven o'clock that night Denny and he started out in company with the mongrel Hawkins for the end of Chapel Street. It was very dark with a gusty wind and a fine spatter of rain, which blew into their faces at the street corners. Denny had made his plan and timed it carefully. The late shift at the mine had gone in an hour ago. A few lads hung about old Thomas' fish shop at the top end, but otherwise the street was deserted. The two men and the dog moved quietly. In the pocket of his heavy overcoat Denny had six sticks of dynamite especially stolen for him that afternoon from the powder shed at the quarry by Tom Seager, his landlady's son. Andrew carried six cocoa tins, each with a hole bored in the lid, an electric torch, and a length of fuse.

Slouching along, coat collar turned up, one eye directed apprehensively across his shoulder, his mind a whirl of conflicting emotions, he gave only the curtest answers to Denny's brief remarks. He wondered grimly what Lamplough – bland professor of the orthodox – would think of him, involved in this outrageous nocturnal adventure.

Immediately above Glyder Place they reached the main manhole of the sewer, a rusty iron cover had not been disturbed for years but, after a struggle,

they prized it up. Then Andrew shone the torch discreetly into the odorous depths, where on the crumbled stonework a dirty stream flowed slimily.

"Pretty, isn't it?" Denny rasped. "Take a look at the cracks in that pointing.

Take a last look, Manson."

No more was said. Inexplicably, Andrew's mood had changed and he was conscious now of a wild upswing of elation, a determination equal to officialdom had done nothing. It was not the moment for the bedside manner and a niggling bottle of physic.

They began to deal swiftly with the cocoa tins, slipping a stick of dynamite in each. Fuses of graduated lengths were cut and attached. A match flared in the darkness, startling in its harsh illumination of Denny's pale hard face, his own shaking hands. Then the first fuse spluttered. One by one the live cocoa tins were floated down the sluggish current, those with the longest fuses going first.

Andrew could not see clearly. His heart was thudding with excitement. It might not be orthodox medicine, but it was the best moment he had ever known.

As the last tin went in with its short fuse fizzing, Hawkins took it into his head to hunt a rat. There was a breathless interlude, filled with the yapping of the dog and the fearful possibilities of an explosion beneath their feet, while they chased and captured him. Then the manhole cover was flung back and they raced frantically thirty yards up the street. They had barely reached the corner of Radnor Place and stopped to look around when bang! The first can went off.

"By God!" Andrew gasped, exultantly. "We've done it." He had a sense of comradeship with the other man, he wanted to grip him by the hand, to shout aloud.

Then swiftly, beautifully, the muffled explosions followed: two, three, four, five, and the last a glorious detonation that must have been at least a quarter of a mile down the Valley.

"There!" said Denny in a suppressed voice, as though all the secret bitterness of his life escaped into that single word.

"That's the end of one bit of rottenness!"

He had barely spoken before the commotion broke. Doors and windows were flung open, shedding light upon the darkened roadway. People ran out of their houses. In a minute the street was thronged. At first the cry went up that it was an explosion at the mine. But this was quickly contradicted – the sounds had come from down the Valley. Argument arose, and shouted speculations. A party of men set out with lanterns to explore. The hubbub and confusion made the night ring. Under cover of the darkness and the noise, Denny and Manson started to dodge home by the back way. There was a singing triumph in Andrew's blood.

Before eight o'clock next morning, Doctor Griffiths arrived upon the scene by car – fat, veal-faced, and verging upon panic, summoned from his warm bed with much blasphemy by Councillor Glyn Morgan Griffiths might refuse to answer the calls of the local doctors, but there was no denying the angry command of Glyn Morgan. And, indeed, Glyn Morgan had cause for anger. The Councillor's new villa half a mile down the Valley had, overnight, become surrounded by a moat of more than mediaeval squalor.

For half an hour the Councillor, supported by his adherents, Hamar Davies and Deawn Roberts, told the Medical Officer, in voices audible to many, exactly

what they thought of him.

At the end of it, wiping his forehead, Griffiths tottered over to Denny who, with Manson stood amongst the interested and edified crowd. Andrew had a sudden qualm at the approach of the Health Officer. A troubled night had left him less elated. In the cold light of morning, abashed by the havoc of the torn-up road, he was again uncomfortable, nervously perturbed.

But Griffiths was in no condition to be suspicious.

"Man, man", he quavered to Philip, "we'll have to get that new sewer for you straight off now."

Denny's face remained expressionless.

"I warned you about that months ago", he said frigidly.

"Don't you remember?"

"Yes, yes, indeed!But how was I to guess the wretched thing would blow up this way? It's a mystery to me how it all happened."

Denny looked at him coolly.

"Where's your knowledge of public health, Doctor? Don't you know these sewer gases are highly inflammable?"

The construction of the new sewer was begun on the following Monday.

(From Medizin, Leipzig: VEB Verlag Enzyklopädie, 1980)

OPERATION IN THE MINE

From THE CITADEL by A. J. CRONIN

...As Andrew swung, head down, into Talgearth Street he was conscious, suddenly, of a man running. The man came behind him, labouring heavily, the noisy clatter of his boots upon the pavement so lost in the gale he seemed a phantom figure. Instinctively Andrew stopped. As the man drew near he recognized him: Frank Davis, an ambulance man of Anthracite Sinking Number Three, who had been one of his first-aid class the previous spring. At the same moment Davis saw him.

"I was comin' for you, Doctor. Comin' for you to your house. This wind's knocked the wires all to smash."

A gust tore the rest of his words away.

"What's wrong?" shouted Andrew.

"There's been a fall-down at Number Three." Davis cupped his hands close to Manson's ear. "A lad got buried there. Almost. They don't seem to be able to shift him. Sam Bevan; he's on your list. Better look sharp, Doctor, and get to him."

Andrew took a few steps down the road with Davis; then a sudden reflection brought him up short.

"I've got to have my bag", he bawled to Davis. "You go up to my house and fetch it for me. I'll go to Number Three." He added: "And Frank! Tell my

missus where I've gone."

He was at Sinking Number Three in four minutes, blown there, across the railway siding and along Roath Lane, by the following wind. In the rescue room he found the under-manager and three men waiting on him. At the sight of him the under-manager's worried expression lifted slightly.

"Glad to see you, Doctor. We're all to bits with the storm. And we've had a nasty fall on top of it. Nobody killed, thank God, but one of the lads pinned by his arm.

We can't shift him an inch. And the roof's rotten."

They went to the winding shaft, two of the men carrying a stretcher with splints strapped to it and the third a wooden box of first-aid material. As they entered the cage another figure came bundling across the yard. It was Davis, panting, with the bag.

"You've been quick, Frank", Manson said as Davis squatted beside him in the cage.

Davis simply nodded; he could not speak. There was a clang, an instant's suspense, and the cage dropped and rocketed to the bottom. They all got out, moving in single file, the under-manager first, then Andrew, Davis, still clutching the bag, then the three men.

Andrew had been underground before; he was used to high vaulted caverns of the Blaenelly mines great dark resounding caves, deep down in the earth where the mineral had been gouged and blasted from its bed. But this sinking, Number Three, was an old one with a long and tortuous haulage-way leading to the workings. The haulage was less a passage than a low-roofed burrow, dripping and clammy through which they crawled often on their hands

and knees for nearly half a mile. Suddenly the light borne by the under-manager stopped just ahead of Andrew, who then knew that they were there.

Slowly, he crept forward. Three men, cramped together on their bellies in a dead end, were doing their best to revive another man who lay in a huddled attitude, his body slewed sideways, one shoulder pointing backwards lost seemingly in the mass of fallen rock around him. Tools lay scattered behind the man too overturned bait cans, stripped-off jackets.

"Well then, lads!" asked the under-manager in a low voice.

"We can't shift him nohow." The man who spoke turned a sweet-grimed face. "We tried everything."

"Don't try", said the under-manager with a quick look at the roof.

"Here's the doctor. Get back a bit, lads, and give us room. Get back a tidy bit if I were you."

The three men pulled themselves back from the dead end and Andrew, when they had squeezed their way past him, went forward. As he did so, in one brief moment, there flashed through his head a memory of his recent examination, its advanced biochemistry, high-sounding terminology and scientific phrases. It had not covered such a contingency as this. Sam Bevan was quite conscious. But his features were haggard beneath their powdering of dust. Weakly he tried to smile to Manson.

"Looks like you're goin' to 'ave some amb'lance practice on me proper!"

Bevan had been a member of that same first-aid class and had often been requisitioned for bandage practice.

Andrew reached forward. By the light of the under-manager's lamp, thrust

across his shoulder he ran his hands over the injured man. The whole of Bevan's body was free, except his left forearm, which lay beneath the fall, so pressed and mangled under that enormous weight of rock that it held him immovably a prisoner.

Andrew saw instantly that the only way to free Bevan was to amputate the forearm. And Bevan, straining his pain-tormented eyes, read that decision the moment it was made.

"Go on then, Doctor", he muttered. "Only get me out of here quick."

"Don't worry, Sam", Andrew said. "I'm going to send you to sleep now.

When you wake up you'll be in bed."

Stretched flat in a puddle of muck under the two-foot roof he slipped off his coat, folded it, and slipped it under Bevan's head. He rolled up his sleeves and asked for his bag.

The under-manager handed over the bag and as he did so he whispered in Andrew's ear:

"For God's sake, hurry, Doctor. We'll have this roof down on us before we know where we are."

Andrew opened the bag. Immediately he smelled the reek of chloroform.

Almost before he thrust his hand into the dark interior and felt the jagged edge of broken glass he knew what had occurred. Frank Davis, in his haste to reach the mine, had dropped the bag. The chloroform bottle was broken, its contents irretrievably spilled. A shiver passed over Andrew. He had no time to send up to the surface. And he had no anaesthetic.

For perhaps thirty seconds he remained paralyzed. Then automatically he

felt for his hypodermic, charged it, gave Bevan a maximum of morphine. He could not linger for the full effect. Tipping his bag sideways so that the instruments were ready to his hand he again bent over Bevan. He said, as he tightened the turniquet: "Shut your eyes, Sam!"

The light was dim and the shadows moved with flickering confusion. At the first incision Bevan groaned between his shut teeth. He groaned again. Then mercifully, when the knife grated upon the bone he fainted. A cold perspiration broke on Andrew's brow as he clipped the artery forceps on spurting, mangled flesh. He could not see what he was doing. He felt suffocated here, in this rathole, deep down beneath the surface of the ground, lying in the mud. No anaesthesia, no theatre, no row of nurses to run to do his bidding. He wasn't a surgeon. He was muddling hopelessly. He would never get through. The roof would crash upon them all.

Behind him the hurried breathing of the under-manager... A slow drip of water falling cold upon his neck... His fingers working feverishly, stained and warm... The grating of the saw... The voice of Sir Robert Abbey a long way off: "The opportunity for scientific practice..."

Oh, God! Would he never get through?

At last. He almost sobbed with relief. He slipped a pad of gauze on the blooded stump. Stumbling to his knees he said:

"Take him out."

Fifty yards back, in a clearing in the haulage way, with space to stand up and four lamps round him, he finished the job. Here it was easier. He tidied up, ligatured and drenched the wound with antiseptic. A tube now. Then a couple of

holding sutures. Bevan remained unconscious. But his pulse, though thin, was steady. Andrew drew his hand across his forehead. Finished.

"Go steady with the stretcher. Wrap these blankets round him. We'll want hot bottles whenever we get out."

The slow procession, bent double in the low places, began to sway up the shadows of the haulage. They had not gone sixty paces when a low rambling subsidence echoed in the darkness down behind them. It was like the last low rumble of a train entering a tunnel. The under-manager did not turn round. He merely said to Andrew with a quiet grimness: "That's it. The rest of the roof." The journey out bye took close upon an hour. They had to edge the stretcher sideways at the bad places. Andrew could not tell how long they had been under. But at length they came to the shaft bottom. Up, up they shot out of the depths. The keen bite of the wind met them as they stepped out of the cage. With a kind of ecstasy Andrew drew a long breath.

He stood at the foot of the steps holding on to the guard- rail. It was still dark, but in the mine yard they had hung a big naphtha flare, which hissed and leaped with many tongues. Around the flare he saw a small crowd of waiting figures. There were women amongst them, with shawls about their heads.

Suddenly as the stretcher moved slowly past them, Andrew heard his name called wildly and the next instant Christine's arms were about his neck. Sobbing hysterically his wife clung to him. Bareheaded, with only a coat above her nightdress, her bare feet thrust into leather shoes, she was a waiflike figure in the gusty darkness.

"What's wrong? He asked, startled, trying to disengage her arms so that

he might see her face. But she would not let him go. Clinging to him frantically like a drowning woman she said brokenly:

"They told us the roof was down- that you wouldn't- wouldn't come out." Her skin was blue, her teeth chattering with cold. He carried her into the fire of the rescueroom, ashamed, yet deeply touched. There was hot cocoa in the rescue-room. They drank from the same scalding cup. It was a long time before either of them remembered about his grand new degree.

(From Medizin, Leipzig: VEB Verlag Enzyklopädie, 1980)

TEXT 11

RESUSCITATION

From THE CITADEL by A. J. CRONIN

Though it was nearly midnight when Andrew reached Bryngower, he found Joe Morgan waiting on him, walking up and down with short steps between the closed surgery and the entrance to the house. At the sight of him the burly driller's face expressed relief.

"Eh, Doctor, I'm glad to see you. I been back and forward there this last hour. The missus wants ye – before time, too."

Andrew, abruptly recalled from the contemplation of his own affairs, told Morgan to wait. He went into the house for his bag, then together they set out for Number 12 Blaina Terrace. The night air was cool and deep with quiet mystery. He had no premonition that his night call would prove unusual, still less that it would influence his whole future in Blaenelly.

The two men walked in silence until they reached the door of Number 12, then Joe drew up short.

"I'll not come in", he said, and his voice showed signs of strain.

"But, man, I know ye'll do well for us."

Inside, a narrow stair led up to a small bedroom, clean but poorly furnished, and lit only by an oil lamp. Here Mrs. Morgan's mother, a tall grey-haired woman of nearly seventy, and the stout elderly midwife waited beside the patient, watching Andrew's expression as he moved about the room.

"Let me make you a cup of tea, Doctor, bach, said the former quickly, after a few moments.

Andrew smiled faintly. He saw the old woman, wise in experience, leave the case, saying he would return later.

"Don't fret, Mother. I'll not run away."

Down in the kitchen he drank the tea which she gave him. Overwrought as she was, he knew he could not snatch even an hour's sleep if he went home. He knew, too, that the case here would demand all his attention. He decided to remain until everything was over. An hour later he went upstairs again, noted the progress made, came down once more, sat by the kitchen fire. It was still, except for the rustle of a cinder in the grate and the slow tick-tock of a wall clock. No, there was another sound- the beat of Morgan's footsteps as he he paced in the street outside. The old woman opposite him sat in her black dress, quite motionless, her eyes strangely alive and wise, probing, never leaving his face.

"Susan said not to give her the chloroform if it would harm the baby. She's awful set upon this child, Doctor, bach." Her old eyes warmed at a sudden thought. She added in a low tone: "Ay, we all are, I fancy." "It won't do any harm, the anaesthetic," he said kindly. "They'll be all right."

Here the nurse's voice was heard calling from the top landing. Andrew glanced at the clock, which now showed half-past three. He rose and went up to the bedroom. He perceived that he might now begin his work.

An hour elapsed. It was a long, harsh struggle. Then, as the first streaks of dawn strayed past the broken edges of the blind, the child was born, lifeless.

As he gazed at the still form a shiver of horror passed over Andrew. After

all that he had promised! His face, heated with his own exertions, chilled suddenly. He hesitated, torn between his desire to attempt to resuscitate the child, and his obligation towards the mother, who was herself in a desperate state. The dilemma was so urgent he did not solve it consciously. Blindly, instinctively, he gave the child to the nurse and turned his attention to Susan Morgan, who now lay collapsed, almost pulseless, and not yet out of the ether, upon her side. His haste was desperate, a frantic race against her ebbing strength. It took him only an instant to smash a glass ampoule and inject pituitrin. Then he flung down the hypodermic syringe and worked unsparingly to restore the flaccid woman. After a few minutes of feverish effort, her heart strengthened; he saw that he might safely leave her. He swung round, in his shirtsleeves, his hair sticking to his damp brow.

"Where's the child?"

The midwife made a frightened gesture. She had placed it beneath the bed.

In a flash Andrew knelt down. Fishing amongst the sodden newspapers below the bed, he pulled out the child. A boy perfectly formed. The limp warm body was white and soft as tallow. The cord, hastily slashed, lay like a broken stem. The skin was of a lovely texture, smooth and tender. The head lolled on the thin neck. The limbs seemed boneless. Still kneeling, Andrew stared at the child with a haggard frown. The whiteness meant only one thing: asphyxia pallida, and his mind, unnaturally tense, raced back to a case he once had seen in the Samaritan, to the treatment that had been used. Instantly he was on his feet.

"Get me hot water and cold water", he threw out to the nurse. "And basins, too. Quick! Quick!"

"But, Doctor – " she faltered, her eyes on the pallid body of the child.

"Quick" he shouted.

Snatching a blanket he laid the child upon it and began the special method of respiration. The basins arrived, the ewer, the big iron kettle. Frantically he splashed cold water into one basin; into the other he mixed water as hot as his hand could bear. Then, like some crazy juggler, he hurried the child between the two, now plunging in into the icy, now into steaming bath.

Fifteen minutes passed. Sweat was now running into Andrew's eyes, blinding him. One of his sleeves hung down, dripping. His breath came pantingly. But no breath came from the lax body of the child.

A desperate sense of defeat pressed on him, a raging hopelessness. He felt the midwife watching him in stark consternation, while there, pressed back against the wall where she had all the time remained, - her hand pressed to her throat, uttering no sound, her eyes burning upon him —was the old woman. He remembered her longing for a grandchild, as great as had been her daughter's longing for this child. All dashed away now; futile, beyond remedy...

"For mercy's sake, Doctor," whispered the midwife. "It's stillborn." Andrew did not heed her. Beaten, despairing, having laboured in vain for half an hour, he still persisted in one last effort, rubbing the child with a rough towel, crushing and releasing the little chest with both his hands, trying to get breath into that limp body.

And then, as by a miracle, the pigmy chest, which his hands enclosed,

gave a short convulsive heave. Another...And another...Andrew turned giddy. The sense of life, springing beneath his fingers after all that unavailing striving, was so exquisite it almost made him faint. He redoubled his efforts feverishly. The child was gasping now, deeper. A bubble of mucus came from one tiny nostril, a joyful iridescent bubble. The limbs were no longer boneless. The head no longer lay back spinelessly. The blanched skin was slowly turning pink. Then, exquisitely, came the child's cry.

"Dear Father in Heaven," the nurse sobbed hysterically, "It's come – it's come alive."

Andrew handed her the child. He felt weak and dazed. About him the room lay in a shuddering litter: blankets, towels, basins, soiled instruments, the hypodermic syringe impaled by its point in the linoleum, the ewer knocked over, the kettle on its side in a puddle of water. Upon the huddled bed the mother still dreamed her way quietly through the anaesthetic. The old woman still stood against the wall. But her hands were together, her lips moved without sound. She was praying.

Mechanically Andrew wrung out his sleeve, pulled on his jacket.

"I'll fetch my bag later, Nurse."

He went downstairs, through the kitchen into the scullery. His lips were dry. At the scullery he took a long drink of water. He reached for his hat and coat.

Outside he found Joe standing on the pavement with a tense, expectant face.

"All right, Joe," he said thickly. "Both all right." It was quite light. Nearly five o'clock. A few miners were already in the streets: the first of the night shift

moving out. As Andrew walked with them, spent and slow, his footfalls echoing with the others under the morning sky, he kept thinking blindly, oblivious to all other work he had done in Blaenelly: "I've done something; oh, God! I've done something real at last."

(From Medizin, Leipzig: VEB Verlag Enzyklopädie, 1980)

TEXT 12

FIRST IMPRESSIONS AND EXPERIENCES (part one)

From: ON THE EDGE OF THE PRIMEVAL FOREST

by ALBERT SCHWEITZER

Note: Albert Schweitzer was born in Alsace in 1875. He won international fame as a theologian, writer, doctor, musician, and philosopher. He lived in Lambarene in Gabon (Equatorial Africa) and was awarded the Nobel peace prize in 1952. He died in 1965.

I decided to promote to the rank of hospital the building, which my predecessor in the house, Mr. Morel, the missionary had used as a fowl house. I got some shelves fixed on the walls, installed an old camp-bed, and covered the worst of the dirt with whitewash, feeling myself fortunate. It was indeed, horribly close in the little windowless room, and the bad state of the roof made it necessary to wear my sun-helmet all day, but when the storm came on, I did not have to move everything under cover. I felt proud the first time I heard the rain rattling on the roof, and it seemed incredible that I could go quietly on with my bandaging.

At the same time I discovered an interpreter and assistant. Amongst my patients there turned up a very intelligent-looking native, who spoke French remarkably well, and said he was a cook by trade but had had to give up that kind of work as it disagreed with his health. I asked him to come to us

temporarily, as we could not find a cook, and at the same time to help me as interpreter and surgical assistant. His name was Joseph, and he proved extremely handy. It was hardly surprising that, as he had acquired his knowledge of anatomy in the kitchen, he would, as a matter of habit, use kitchen terms in the surgery: "This man's right leg of mutton hurts." "This woman has a pain in her upper left cutlet, and in her loin!" At the end of May N'Zeng arrived, the man whom I had written to engage beforehand, but as he did not seem to be very reliable, I kept Joseph on. Joseph is a Galoa, N'Zeng a Pahouin.

Work was now fairly well started. My wife had charge of the instruments and made the necessary preparations for the surgical operations, at which she served as assistant, and she also looked after the bandages and the washing of the linen. Consultations begin about 8.30, the patients waiting in the shade of my house in front of the fowl house, which is my surgery, and every morning one of the assistants reads out:

The doctor's standing orders

- 1. Spitting near the doctor's house is strictly forbidden.
- Those who are waiting must not talk to each other loudly.
- 3. Patients and their friends must bring with them food enough for one day, as they cannot all be treated early in the day.
- 4. Anyone who spends the night on the station without the doctor's permission will be sent away without any medicine. (It happened not infrequently that patients from a distance crowded into the schoolboys' dormitory, turned out, and took their places.)
 - 5. All bottles and tin boxes in which medicines are given must

be returned.

6. In the middle of the month, when the steamer has gone up the river, none but urgent cases can be seen till the steamer has gone down again, as the doctor is then writing to Europe to get more of his valuable medicines. (The steamer brings the mail from Europe about the middle of the month, and on its return takes our letters down to the coast.)

These six commandments are read out every day very carefully in the dialect of both the Galoas and the Pahouins, so that no long discussion can arise afterwards. Those present accompany each sentence with a nod, which indicates that they understand, and at the finish comes a request that the doctor's words shall be made known in all the villages, both on the river and on the lakes.

At 12.30 the assistant announces: "The doctor is going to have his lunch." More nods to show that they understand, and the patients scatter to eat their own bananas in the shade. At 2 p. m. we return, but at 6 p. m. there are often some who have not yet been seen, and they have to be put off till the next day. To treat them by lamplight cannot be thought of because of the mosquitoes and the risk of fever infection. Each patient is given, on leaving, a round piece of cardboard on a string of fiber, on which is the number under which his name, his complaint, and the medicines given him are recorded in my register, so that if he comes back I have only to turn to the page to learn all about the case, and be spared a time wasting second diagnosis. The register records also all the bottles, boxes, bandages etc., which were given; only with this means of control is it possible to demand the return of these things, which in about half the cases we do get back. How valuable bottles and boxes are away from the civilized world only he can

rightly estimate who has had to get medicines ready in the Primeval Forest for patients to take home with them!

The atmosphere is so damp here that medicines which in Europe can be wrapped in paper or distributed in cardboard boxes, can only be kept in good condition in a corked bottle or in a tin box, which closes perfectly. I had not taken sufficient account of this, and I found myself in such difficulty about it that I had to fall out with patients who said they had forgotten or lost a tin box. My friends in Europe were entreated by every post to collect from their acquaintances bottles big and little, glass tubes with corks, and tin boxes, of all sorts and sizes. How I look forward to the day when I shall have a sufficient supply of such things. The round cardboard ticket with the number on it most of the patients wear round their neck together with the metal one which shows that they have paid their five franc poll-tax for the current year. It is seldom lost or forgotten, and many of them, especially among the Pahouins, regard it as a kind of fetish.

My name among the natives in Galoa is "Oganga", i.e. fetish-man. They have no other name for a doctor, as those of their own tribesmen who practice the healing are all fetish-men. My patients take it to be only logical that the man who can heal disease should also have the power of producing it, and that even at a distance. To me is striking that I should have the reputation of being such a good creature, and yet at the same time such a dangerous one! That the diseases have some natural cause never occurs to my patients: they attribute them to evil spirits, to malicious human magics, or to "the worm", which is their imaginary embodiment of pain of every sort. When they are asked to describe their symptoms, they talk about the worm, telling he was first in their legs, then

went into their head, and from there made his way to their heart: how he then visited their lungs, and finally settled in their stomach. All medicines have to be directed to expelling him. If I quiet a colic with tincture of opium, the patient comes next day beaming with joy and tells me the worm has been driven out of his body but is now settled in his head and is devouring his brain: will I please give him something to banish the worm from his head, too?

I get on the average, from 30 to 40 people a day to treat, and the chief complaints are skin diseases of various sorts, malaria, the sleeping sickness, leprosy, elephantiasis, heart complaints, suppurating injuries to the bones (osteomyelitis), and tropical dysentery. To stop the discharge from the sores the natives cover the place with powder made from the bark of a certain tree. This hardens gradually into a paste, which hinders the escape of the pus and of course, makes the case much worse. From the list of the complaints, which come oftenest to be treated the itch (scabies) must not be omitted. It causes the blacks very great distress, and I have had patients who had not slept for weeks because they had been so tortured by the itching. Many had scratched their own body till the blood came, so that there were festering sores to treat as well as scabies. The treatment is very simple. The patient first washes in the river and is then rubbed all over, however tall he is, with an ointment compounded of flour of sulphur (sulphur depuratum), crude palm oil remains of oil from sardine tins and soft soap. In a tin which once contained sterilized milk he receives a quantity of this ointment with which to give himself at home two more rubbings. The success of this is wonderful, the itching ceasing to worry on the second day and in a very few weeks this ointment has made me famous far and wide. January 10, 1914. I

had scarcely finished writing the above paragraphs this afternoon when I had to hurry off to the landing place. Mrs. Faure, the wife of the missionary at N'Gomo, arrived in a motor boat suffering from a severe attack of malaria, and I had scarcely given her a first intramuscular injection of quinine when a canoe brought in a young man who had had his right thigh broken and badly mutilated by a hippopotamus in Lake Sonange. In other respects too, the poor fellow was in a bad condition. He and his friend had gone out together to fish, but not far from their landing place of their village a hippopotamus had come up unexpectedly and hurled their boat into the air. The friend escaped, but my patient was chased about in the water by the enraged beast for half an hour, though he was able at last to get to the shore in spite of his broken thigh. I was afraid there would be serious blood poisoning for they had brought him the twelve hours' canoe journey with his mutilated thigh wrapped in dirty rags.

I have myself had a meeting with a hippo, but it fortunately ended well.

One autumn evening I was called up to visit a planter, and to get to him we had to pass a narrow canal about fifty yards long, with a very strong current. On the journey out we saw two hippos in the distance. For the journey home, which would be in the dark for night had fallen, the store people advised me to make a detour of a couple of hours so as to avoid the canal and the animals, but the rowers were so tired that I would not ask them for so much extra exertion. We had just got to the entrance of the canal when the two hippos came up from a dive thirty yards ahead of us, their roar sounding much as if children were blowing a trumpet into a watering can, only louder. The crew at once drew in close to the bank, where the current was least strong, but we advanced very

slowly, foot by foot, the hippos accompanying us, swimming along the other bank. It was a wonderful, exciting experience. Some palm tree stems, which had got fixed in the mid-stream rose out of the water and swayed about like reeds; on the bank the forest rose straight up like a black wall, and an enchanting moonlight illuminated the whole scene. The rowers gasped with fear and encouraged each other with low calls while the hippos pushed their ugly heads out of the water, and glared angrily across at us. In a quarter of an hour we had got out of the canal and were descending the narrow arm of the river, followed by a parting roar from the hippos. I vowed that never in future would I be so scrupulous about adding even two hours to a journey, in order to get out of the way of these interesting animals, yet I should be sorry not to be able to look back on those wonderful minutes, uncomfortable though the experience seemed at the time.

(From Medizin, Leipzig: VEB Verlag Enzyklopädie, 1980)

TEXT 13

FIRST IMPRESSIONS AND EXPERIENCES (part two)

From: ON THE EDGE OF THE PRIMEVAL FOREST

by ALBERT SCHWEITZER

As to operations, one undertakes, naturally, in the forest only such as are urgent and which promise a successful result. The one I have had to perform oftenest is that of hernia, a thing which afflicts the Negroes of Central Africa much more than it does white people, though why it should be so we do not know. They also suffer much oftener than white people from strangulated hernia, in which the intestine becomes constricted and blocked, so that it can no longer empty itself. It then becomes enormously inflated by the gases, which form, and this causes terrible pain. Then after several days of torture, death takes place, unless the intestine can be got back through the rupture into the abdomen. Our ancestors were well acquainted with this terrible method of dying, but we no longer see it in Europe because every case is operated upon as soon as ever it is recognized. "Let not the sun go down upon your strangulated hernia," is the maxim continually impressed upon medical students. But in Africa this terrible death is guite common. There are few Negroes who have not as boys seen some man rolling in the sand of his hut howling with agony till death came to release him. So now, the moment a man feels that his rupture is a strangulated one rupture is far rarer among women - he begs his friends to put him in a canoe and bring him to me.

How can I describe my feelings when a poor fellow is brought to me in this condition? I am the only person within hundreds of miles who can help him.

Because I am here and am supplied by my friends with the necessary means, he can be saved, like those who came before him in the same condition and those who will come after him white otherwise he would have fallen a victim to the torture. This does not mean merely that I can save his life. We must all die. But that I can save him from days of torture, that is what I feel as my great and ever new privilege. Pain is a more terrible lord of mankind than even death himself.

So, when the poor, moaning creature comes, I lay my hand on his forehead and say to him: "Don't be afraid! I an hour's time you shall be put to sleep, and when you wake up you won't feel any more pain." The doctor's wife is called to the hospital and, Joseph's help, makes everything ready for the operation. When that is to begin she administers the anaesthetic, and Joseph, in along pair of rubber gloves, acts as assistant.

The operation is finished, and in the hardly lighted dormitory I watch for the sick man's awakening. Scarcely has he recovered consciousness when he stares about him and ejaculates again and again: "I've no more pain!"... His hands feel mine and will not let it go.

The African sun is shining through the coffee bushes into the dark shed, but we, black and white, sit side by side and feel that we know by experience the meaning of the words: "And all ye are brethren". Would that my generous friends in Europe could come out here and live through one such hour!

Polygamy is a difficult social problem here. We Europeans come here with our ideal of monogamy against polygamy, in some places even urging the

Government to suppress it by law. On the other hand, all of us here must allow that it is closely bound up with the existing economic and social conditions. Where the population lives in bamboo huts, and society is not so organized that a woman can earn her own living, there is no room for unmarried woman, and if all women are to be married, polygamy is a necessary condition. Moreover, there are in the forest neither cows nor nanny goats, so that a mother must suckle her child for a long time if it is to be reared. Polygamy safeguards the claims of the child, for after its birth the woman has the right, and the duty, of living only for her child; she is no longer a wife, but only a mother, and she often spends the greater part of this time with her parents. At the end of three years comes the weaning, which is marked by a festival, and then she returns to her husband's hut to be a wife once more. But this living for her child is not to be thought of unless the man has another wife, or other wives, to make a home for him and look after his banana plots.

Here is another point for consideration. Among these nature-peoples there are no widows unprovided for and no neglected orphans. The nearest male relative inherits the dead man's widow, and must maintain her and her children. She enters into enjoyment of all the rights of his other wives, even though she can later, with his consent, take another husband.

To agitate, therefore, against polygamy among primitive peoples, is to undermine the whole structure of their society. Have we the right to do this if we are not in a position to give them a new social order, which suits their own circumstances?

How shall I sum up the resulting experience of these four and a half

years? On the whole it has confirmed my view of the considerations, which drew me from the world of learning and art to the primeval forest. "The natives who live in the bosom of Nature are never so ill as we are, and do not feel pain so much." That is what my friends used to say to me, to try and keep me at home, but I have come to see that such statements are not true. Out here there prevail most of the diseases which we know in Europe, and several of them – those hideous ones, I mean, which we brought here – produce, if possible, more misery than they do amongst us. And the child of nature feels them as we do, for to be human means to be subject to the power of that terrible lord whose name is Pain.

Physical misery is great everywhere out here. Are we justified in shutting our eyes and ignoring it because our European newspapers tell us nothing about it? We civilized people have been spoilt. If anyone of us is ill the doctor comes at once. Is an operation necessary, the door of some hospital or other opens to us immediately. But let everyone reflect on the meaning of the fact that out here millions and millions live without help or hope of it. Every day thousands and thousands endure the most terrible sufferings, though medical science could avert them. Every day there prevails in many and many a far-off hut a despair which we could banish. Will each of my readers think what the last ten years of his family history would have been if they had passed without medical or surgical help of any sort? It is time that we should wake from slumber and face our responsibilities!

Ever since the world's far-off lands were discovered, what has been the conduct of the white peoples to the coloured ones? What is the meaning of the simple fact that this and that people has died out, that others are dying out and

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that the condition of others is getting worse and worse as a result of their discovery by men who professed to be followers of Jesus? Who can describe the injustice and the cruelties that in the course of centuries they have suffered at the hands of Europeans? Who can measure the misery produced among them by the fiery drinks and the hideous diseases that we have taken to them? If a record could be compiled of all that has happened between the white and the coloured races, it would make a book containing number of pages, referring to recent as well as early times, which the reader would have to turn over unread, because their contents would be too horrible.

Our civilization and we are burdened, really, with a great debt. We are not free to confer benefits on these men, or not, as we please; it is our duty. Anything we give them is not benevolence but atonement. For everyone who scattered injury some one ought to go out to give help, and when we have done all that is in our power, we shall not have atoned for the thousand part of our guilt. That is the foundation from which all deliberations about "works of mercy" out there must begin.

It goes without saying that Governments must help with the atonement, but they cannot do so till there already exists in society a conviction on the subject. The Government alone can never discharge the duties of humanitarism; from the nature of the case that rests with society and individuals.

The Government can send out as many colonial doctors as it has its disposal, and as the colonial budgets are able to pay for. It is well known that there are great colonizing powers which cannot find even enough doctors to fill the places of those already working in their colonies, though these are far from

sufficient to cope with the need. So again, we see, the real burden of the humanitarian work must fall upon society and its individual members. We must have doctors who go among the coloured people of their own accord and are ready to put up with all that is meant by absence from home and civilization. I can say from experience that they will find a rich reward for all that they renounce in the good that they can do. Among the poor people out here they will not as a rule be able to collect the cost of their own living and work; men must come forward at home who will provide what is necessary, and that is something that is due from all of us.

(From Medizin, Leipzig: VEB Verlag Enzyklopädie, 1980)

TEXT 14

from: A FAREWELL TO ARMS by ERNEST HEMINGWAY

Note: Bullfighter, and aficionado, boxer, big-game hunter, fisherman and war correspondent, Hemingway lived near danger all his life. A Nobel Prize winner, a best selling author, it was the intensity of his personal life, which gave his writings their vividness and brilliance. He was a legend in his own lifetime, and his lifetime was as dramatic as his writings.

"I'm not going to die now, darling. I'm past where I was going to die. Aren't you glad?"

"Don't you get in that place again."

"I won't. I'm not afraid of it though. I won't die, darling."

"You will not do any such foolishness," the doctor said.

"You would not die and leave your husband."

"Oh, no. I won't die. I wouldn't die. It's silly to die. There it comes. Give it to me."

After a while the doctor said, "You will go out, Mr. Henry, for a few moments and I will make an examination."

"He wants to see how I am doing," Catherine said. "You can come back afterward, darling, can't he, doctor?"

"Yes," said the doctor. "I will send word when he can come back."

I went out the door and the hall to the room where Catherine was to be

after the baby came. I set in the chair there and looked at the room. I had the paper in my coat that I had bought when I went out for lunch and I read it. It was beginning to be dark outside and I turned the light on to read. After a while I stopped reading and turned off the light and watched it get dark outside. I wondered why the doctor did not send for me. Maybe it was better I was away. He probably wanted me away for a while. I looked at my watch. If he did not send for me in ten minutes, I would go down anyway.

Poor, poor dear Cat and this was the price you paid for sleeping together. This was the end of the trap. This was what people got for loving each other. Thank God for gas, anyway. What must it have been like before there were anaesthetics? Once it started, they were in the millrace. Catherine had a good time in the time of pregnancy. It wasn't bad. She was hardly ever sick. She was not awfully uncomfortable until toward the last. So now they got her in the end. You never got away with anything. Get away hell! It would have been the same if we had been married fifty times. And what if she should die? She won't die. People don't die in childbirth nowadays. That was what all husbands thought. Yes, but what if she should die? She won't die. She's just having a bad time. The initial labor is usually protracted. She's only having a bad time. Afterward we'd say what a bad time and Catherine would say it wasn't really so bad. But what if she should die? She can't die. Yes, but what if she should die? She can't, I tell you. Don't be a fool. It's just a bad time. It's just nature giving her hell. It's only the first labor, which is almost always protracted. Yes, but what if she should die? She can't die. Why would she die? What reason is there for her to die? There's just a child that has to be born, the by-product of good nights in Milan. It makes

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		지근 살았다. 한 날로만 만든 다시다.

trouble and is born and then you look after it and get fond of it maybe. But what if she should die? She won't. She's all right. But what if she should die? She can't die. But what if she should die? Hey, what about that? What if she should die?

The doctor came into the room.

"How does it go, doctor?"

"It doesn't go," he said.

"What do you mean?"

"Just that. I made an examination." He detailed the result of the examination. "Since then I've waited to see. But it doesn't go."

"What do you advise?"

"There are two things. Either a high forceps delivery, which can tear and be quite dangerous besides being possibly bad for the child, and a Caesarean."

"What is the danger of a Caesarean?" What if she should die!

"It should be no greater than the danger of an ordinary delivery."

"Would you do it yourself?"

"Yes. I would need possibly an hour to get things ready and to get the people I would need. Perhaps a little less."

"What do you think?"

"I would advise a Caesarean operation. If it were my wife I would do a Caesarean."

"What are the after effects?"

"There are none. There is only the scar."

"What about infection?"

"The danger is not so great as in a high forceps delivery."

"What if you just went on and did nothing?"

"You would have to do something eventually. Mrs. Henry is already losing much of her strength. The sooner we operate now the safer."

(From English for Medicine and Pharmacy, Bucharest: Cavallioti Publishing House and The British Council, 2000, p. 78)

Flowchart

1		
2	·	
3		
4		

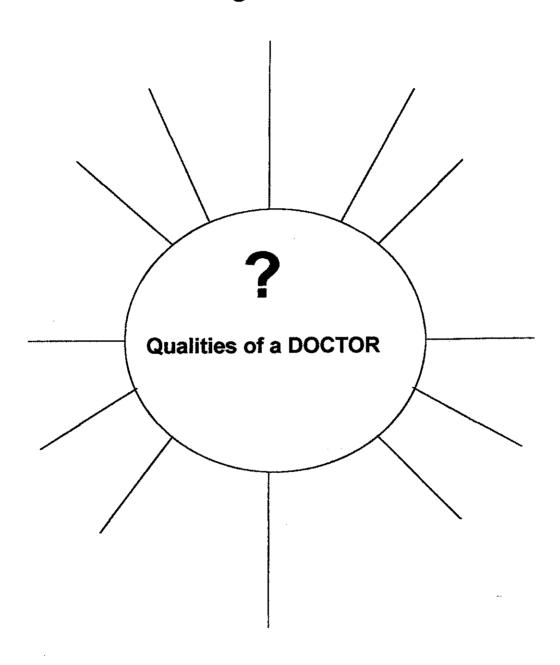
Put the events in order in the above cases:

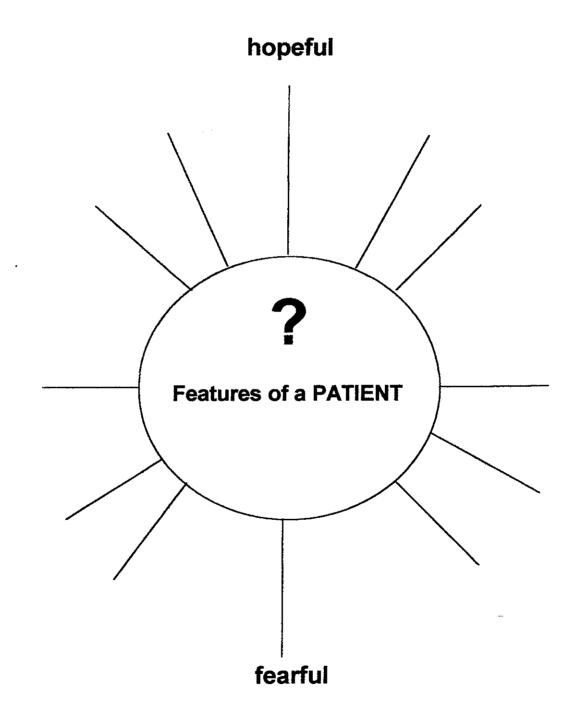
- Dialogue doctor patient's family member
- Dialogue patient -- patient's family member
- Dialogue patient doctor -patient's family member
- Patient's family member monologue (torments)

"ATTITUDE" GRID

	Attitude to:							
	life	death	the patient	the doctor	the family member	decision		
Doctor's								
Patient's								
Patient's family member's								

strong character





TEXT 15

DISEASE IN TIME AND SPACE

The history and geography of disease are the foundation of all medico-historical work. Indeed, it is the incidence of illness in general and of special diseases in particular that constitutes the health problems of a society. And if we wish to understand the reactions of that society against its diseases we must know of them./.../

The first question that comes to mind is that of the origin of disease,. How old is the phenomenon "disease"? Is it as old as life itself or is it the result of civilization? Was there a time when everyone lived to a ripe old age and died the physiological death of old age, or was man at all times fettered by bonds of disease, and if so, to what extent and by what diseases?

Paleopathology / the antiquity of disease

Speculation on the subject leads us to the assumption that disease must be as old as life itself. Why? Because disease is nothing else but life, life under changed circumstances. /.../ The human organism—is able to adapt itself to widely differing environmental conditions, and we can live safely in—the tropics and in the arctic, at sea level and in high altitudes. There can be no doubt, however that at all times there must have been chemical, physical, or biological stimulations acting on the organism that exceeded its adaptability so that its reactions were no longer physiological but pathological; reactions that to the observer would appear as symptoms of disease. /.../

We cannot be satisfied with a mere speculative answer to the important

question of the antiquity of disease and we must try to solve the problem objectively. Since most basic forms of disease manifest themselves in the bones, we should be able to draw far-reaching conclusions from our findings. They will not tell us directly whether pneumonia or pleurisy occurred at en early date. They will reveal whether such a pathological mechanism as inflammation occurred at that time. If the bones reacted against certain lesions with inflammation we are justified in assuming that other organs did too. /.../ So, Paleopathology began with the examination of bones. Bones and teeth are still the most important materials we possess, because they have been preserved in relatively large numbers, from far remote periods and from various sections of the globe. I...I Today it is possible to examine the histology of fossil bones with the microscope. The bone is fixed in formaldehyde and then is decalcified, whereupon sections are made, stained, and embedded in celluloidin. Other sections may be made by arinding. The microscopic examination permits a much more precise diagnosis than would be possible otherwise. But by far the greatest technical advance was made when radiology began to be used in the examination of anthropological and paleontological materials. In 1925 the Field Museum of Natural History in Chicago established a Division of Roentgenology, thus inaugurating a new departure in museum practice and technique.

At this point it is time to discuss other sources of evidence for the antiquity of disease. The mummies are a rich source of ancient pathological evidence. From no other country have so many remains of deceased mankind come down to us as from Egypt. Climate, soil, religious beliefs, burial customs, all contributed toward the earth's preserving what had been entrusted to it. The

EPOCONOGRAFION GODINI (MONO) O GODI ONI SONO (CONTOCONO CO CO CONTOCONO CONTOCONO CONTOCONO CONTOCONO CONTOCON

examination of skeletal remains for pathological lesions was undertaken at the end of the last century by R. Fouquet and ten years later, on a much larger scale, by G.Elliot Smith and F. Wood Jones, who measured and investigated thousands of skeletons from Nubia. They found many evidences of disease within the limitations imposed by the material, which consisted of bones exclusively.

There are two general conclusions that we may draw. One is that the custom of embalming did not provide opportunities for anatomical studies. The organs were extracted through a relatively small opening in a rough and brutal manner. They are frequently found mutilated; and the embalmers, moreover, were uneducated craftsmen. They had some anatomical knowledge to be sure, the same kind of knowledge that the butchers and cooks had, or the priests who sacrificed animals to the gods, but not more.

The other conclusion is that the organs of mummies are preserved well enough to permit microscopic examination. To that end the mummified tissues must be softened, they must be restored to original size and consistency, and artificial coloring matter must be extracted. Ruffer found that he had best results when he placed tissues in a stock solution containing alcohol 30cc., water 50cc. and 5 per cent carbonate of soda solution 20cc. We can well imagine what his feelings must have been when for the first time he saw the striation of voluntary muscular fibers and nuclei of cells from the body of an individual who had died eight thousand years before.

Mummies have been found not only in Egypt but also in America, notably in Peru, and as early as 1904 an American anthropologist, H. H. Wilder, described methods for the examination of dried tissues. The experience gained

with the rich Egyptian material was a stimulus and benefited American archaeology. The pathology of pre-Columbian America, however, belongs to a totally different period of history, and will therefore be discussed in a later volume of this book.

To the examination of bones and mummies we must add a third method that may sometimes be used when the others fail, namely, the interpretation of early works of art. It is not an ideal method because works of art are indirect sources, the interpretation of which is often difficult and very uncertain, and because the early material available is very limited. But we have recourse to it to fill in gaps taking advantage particularly of the rich findings of Egyptian archaeology.

The question now arises: What are the results of paleopathology?

Examining human and animal remains of early historic and prehistoric times, do
we find evidences of disease? If so what diseases? And how far can we trace
disease?

Beginning with disturbances in development and metabolism, wee find that deformations are not rare in our material. A deformity of the skull attributed to hydrocephalus was found in an Egyptian mummy of the Roman period. Dwarfs in ancient Egypt have been the subject of a number of studies. They were then popular with the courts just as they were in Rome, in the Middle Ages, and in the Renaissance. Most of them were not cretins but intelligent little fellows, witty and strong. They owed their condition to a strange disease of still unknown origin, chondrodystrophia fetalis or achondroplasia, a disease of the cartilage during fetal life as a result of which the endochondral ossification stops while peritoneal

bone formation continues. Such infants are born, therefore, with very short legs and arms but large skulls and normal muscles. Atrophy of the bone due to old age, senile osteoporosis, cannot be called a disease. It is a normal occurrence and is, therefore, frequently encountered in ancient remains. Another disease that affects young children and leaves definite marks in the bones is rickets. There is very little evidence for the occurrence of the disease for the occurrence of the disease in prehistoric and early historic times. Not a single body has ever been found in Egypt that could have been diagnosed with any certainty as having been affected with rickets, although the number of children's bodies preserved is large. There are a few paintings representing bowlegged individuals that be interpreted as an indication of rickets, and a mummy of a baboon examined by Poncet, but this is about all. The counterpart of rickets in adults, particularly women, is osteomalacia, a disease that usually begins during pregnancy and like rickets leads to a decalcification of the bones with resulting deformities. A case of Neolithic acromegaly from Switzerland has been described by O. Schlaginhaufen, but his diagnosis has been contested and must remain uncertain since it is based on the examination of an incomplete femur. Periostitis is often caused by an injury such as a blow. In minor acute cases the periosteum merely thickens, but if the process becomes chronic a periostitis ossificans develops. The periosteum produces new bone, which adheres to the surface of the old bone, and as a result the normally smooth surface appears rough and rugged. Many such bones have been found, in Egypt and in Neolithic Europe. Osteomyelitis seems to have also been a frequent occurrence not only in man but in fossil animals too.

Another group of diseases is that of chronic inflammatory disease that affects the joints, and includes the various types of arthritis deformans or spondylitis deformans, as the disease is called when it is localized in the spinal column. This is actually a group of diseases of the joints, of different origin, in the course of which the joints become enlarged, produce new bone, thus creating deformities, and with a tendency to ankylosis, a condition under which the joint has become completely rigid. The arthritic diseases are today among the most disabling and crippling diseases, and paleopathology teaches us that this was the case thousands and millions of years ago. Under the most varied climates, under the sun of Egypt, in the caves of Neolithic France, in the mountains of Peru, people of all ages, but particularly people of mature and old age, suffered atrocious pains in their joints and felt their spine, their hip, or knee stiffening gradually until they could hardly move. They were crippled and helpless unless their neighbors attended to them. The material is so vast that we cannot possibly list all of it and therefore we will merely point out a few examples. Numerous cases of arthritis and particularly spondylitis have been found in Egypt, from Nubia to the Delta, from 4000 B.C. to the Roman era. Men of all races, Egyptians, Negroes, Asiatics, were equally subject to the disease. There has been speculation why it was so prevalent in Egypt. Climate, mode of living, "dabbling in the water of the Nile", have been held responsible. It is believed that many cases of arthritis develop from a primary infectious focus, following a tonsillitis or dental infection. The Egyptians suffered from pyorrhea, to be sure, but so have other nations. Everybody, everywhere, suffers frequently from minor infections, and we should admit that we still know very little about the etiology of

arthritis. In Neolithic Europe also the disease was by no means rare, and bones with arthritic changes have been described particularly from France, England, Germany and the Scandinavian countries. The disease can be traced back to Paleolithic remains and still further back to some of the earliest known human skeletons of the Neanderthal race.

What does paleontology teach us? Speculating about the origin of disease, we thought it must be as old as life itself because it is life, a manifestation of life, the reaction of a living organism to abnormal stimuli. Paleontology basically confirms our assumption. The most important result of paleontological studies is that we find that disease occurred at all times in the same basic forms. What pathologists like to tell us is that the human organism developed and perfected its defense reactions in the course of time. Paleontology, however teaches us that these mechanisms of defense are not the prerogative of man perfected through long generations, but that animals, millions of years ago, possessed them as well and perhaps even in much greater perfection. That men was able to survive and to attain the position he holds in nature is due to the fact that he was endowed with a larger brain and greater intelligence, which enabled him through long generations to perfect not his natural but artificial defense mechanisms, to direct and increase the natural healing power of the body with artificial means, learning to use physical, chemical, and biological forces to that end.

(Adapted from Sigerist, H.E., <u>A History of Medicine</u>, New York: Oxford University Press, 1955, pp. 37-66).

TEXT 16

HIPPOCRATIC OATH

The oath exacted of his students by Hippocrates:

"I swear by Apollo the physician, and Aesclapius, and Hygeia, and Pancea, and all the gods and goddesses, that according to my ability and judgment, I will keep this oath and its stipulation – to reckon him who taught me this art equally dear to me as my parents, to share my substance with him, and to relieve his necessities if required; to look upon his offspring in the same footing as my own brothers, and to teach them this art if they shall wish to learn it, without fee or stipulation, and that by precept, lecture, and every other mode of instruction, I will impart a knowledge of the art to my own sons, and those of my teachers, and to disciples bound by a stipulation and oath according to the law of medicine, but to none other.

"I will follow that system of regimen which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from whatever is deleterious and mischievous. I will give no deadly medicine to anyone if asked, nor suggest any such counsel; and in like manner I will not give to a woman a pessary to produce abortion. With purity and with holiness I will pass my life and practice my art. I will not cut persons laboring under the stone, but will leave this to be done by men who are practitioners of this work. Into whatever houses I enter, I will go into them for the benefit of the sick, and I will abstain from every voluntary act of mischief and corruption; and, further, from the seduction of females or males, of freemen and slaves. Whatever in connection with my

professional practice, or not in connection with it, I see or hear, in the life of men, which ought not to be spoken of abroad, I will not divulge, as reckoning that all such should be kept secret.

"While I continue to keep this Oath unviolated, may it be granted to me to enjoy life and the practice of this art, respected by all men, in all times. But should I trespass and violate this Oath, may the reverse be my lot."

DECLARATION OF GENEVA

A statement adopted in 1948 by the Second General Assembly of the World Association. Some medical schools use it at graduation exercises.

"At the time of being admitted as Member of the Medical Profession I solemnly pledge myself to consecrate my life to the service pf humanity. I will give to my teachers the respect and gratitude, which is their due; I will practice my profession with conscience and dignity. The health of my patient will be my first consideration; I will respect the secrets which are confided in me; I will maintain by all the means in my power, the honor and the noble traditions of the medical profession; my colleagues will be my brothers; I will not permit considerations of religion, nationality, race, party politics or social standing to intervene between my duty and my patient; I will maintain the utmost respect for human life, from the time of conception; even under threat, I will not use my medical knowledge contrary to the laws of humanity. I make these promises solemnly, freely and upon my honor

PRAYER OF MAIMONIDES

(by Rabi Moses ben Maimon, Jewish philosopher and physician in Egypt, 1135-1204).

A prayer used at graduation ceremonies by some medical schools

"Thy eternal providence has appointed me to watch over the life and health of Thy creatures. May the love for my art actuate me at all times; may neither avarice nor miserliness, nor thirst for glory, or for the great reputation engage my mind; for the enemies of truth and philanthropy could easily deceive me and make me forgetful of my lofty aim of doing good to Thy children.

"May I never see in the patient anything but a fellow creature in pain.

"Grant me strength, time, opportunity always to correct what I have acquired, always to extend its domain; for knowledge is immense and the spirit of man can extend indefinitely to enrich itself daily with new requirements.

"Today he can discover his errors of yesterday and tomorrow he can obtain a new light on what he thinks himself sure of today. Oh, God, Thou has appointed me to watch over the life and death of Thy creatures; here am I ready for my vocation and now I turn unto my calling."

TEXT 17

Read the article below published in BMJ, and write its summary (100-120 words) article afterwards:

MEDICAL STUDENTS, THEIR ELECTIVES, AND HIV

Unprepared, ill advised, and at risk

Most medical students go overseas on their electives – 97% from one medical school – and many go to Africa. The attractions are obvious: adventure, travel, new cultures, and a depth and range of medical experience that may never be gained at home. However, like any travel experience, electives can be dangerous. British medical students doing electives overseas often go to areas with high HIV prevalence, work in settings with poor infection control practices, and are exposed to HIV and other bloodborne viruses. The reports by Moss and Beeching (p 161) and Gamester (158) et al in this week's issue provide shocking data that help to quantify these concerns.

In their questionnaire survey of British medical schools Moss and Beeching show that only half the schools provide written advice about health and safety on electives. Most rely on the normal curriculum for providing information on personal risks of acquiring HIV, and only two schools make post exposure prophylaxis for HIV exposure available to students going overseas on their electives. Schools vary greatly in the quality of advice and support given. By studying and working in high prevalence settings students are clearly at risk, and many schools seem to be sending them away unprepared and ill advised.

Gamester et al sent a questionnaire to 220 final year students at one medical school who had recently returned from their electives. Although only 67% replied, the data are illuminating. Many students (44%) had worked in what was defined as a high HIV prevalence setting, but many (42%) had been unaware of even this. What does "high prevalence setting" really mean? About 60% of patients admitted to the acute medical service at Hlabisa hospital, South Africa, in early 1998 had HIV infection (A Reid, personal communication), and by the end of 1998, 41% of pregnant women in the district were infected with HIV (unpublished data). Any invasive procedure in this setting is potentially dangerous, and as a result provincial and national health authorities have established HIV post exposure prophylaxis telephone hotlines.

Four students (3%) reported percutaneous or mucosal exposure on their elective. Most of these incidents seem not to have been well managed or followed up when the students returned home. Written guidelines to help prevent and manage these incidents were provided by their medical school, but it is worrying that the guidance was often not heeded – even by students' advisers. For example, against policy, some students did attachments in obstetrics and surgery in Africa, and among those visiting high prevalence settings only 34% took a zidovudine starter pack with them.

At the University of Adelaide Medical School, about 45% of fifth year students taking electives travel to potentially high-risk settings, and this proportion is likely to rise as the school has accepted a programme of extended placement in South Africa as an alternative path to the sixth year exam. Already, one student working there has experienced a needlestick injury, representing one

incident in about 80 weeks of clinical work. Preparation for electives varies from nothing, beyond normal undergraduate course content to an integrated programme. Notices seeking applicants for this programme raise the issue of HIV; the selection panel checks that students understand the risks; and after selection the students receive a tutorial with a doctor experienced in HIV medicine. No drugs have been sent to date, and no restrictions are placed on activity, but debriefing does occur on return to Australia. Today's articles will, however, lead to important changes.

Vocabulary Note

The International Federation of medical Students' Association (IFMSA) has defined an **elective** as follows:

"An elective is an opportunity for a student to do a research or specialized clinical project in order to deepen his or her knowledge in a field of his or her personal interest. An elective should therefore not be mistaken for an introduction or a basic course on the subject concerned. The student should be given academic credit for the project at his or her home university. A personal tutor is obligatory at the hosting university and the home university is also requested to provide one for the student going abroad. Both tutors are responsible for the recognition and academic credit obtained by the student. "

Student sample texts

Razvan, Anul III

Saul Bellow - The Dean's December

Character presentation

Minna, Corde's wife of Romanian origin, the daughter of two famous Romanian doctors, Doamna Doctor Valeria and Doctor Raresh, was a very distinguished and beautiful woman who had an international reputation as a professor of astronomy. Her high standing and her academic importance brought her respect and recognition. She had been at Harvard graduate school. Professionally she was superconscientious. Nothing was allowed to interfere with duties. She was not only very smart but also very warm and cheerful, beautiful and elegant and she had class. She had wonderful style. She was admired. She was an only child who had come such a distance to be near her dying mother. She spoke emotionally about her. She had never renounced her Romanian citizenship. However, she had forgotten how things were in communist Romania or maybe she had never known them for real.

CHARACTER PRESENTATION

SAUL BELLOW - THE DEAN'S DECEMBER

Doctor Raresh was Minister of Health. He was the country's first neurosurgeon, trained in Boston by the famous Dr. Cushing. In the drawers, in Valeria, s flat there were all sorts of things such as papers from the time of the monarchy, newspaper clippings but also letters from Dr. Cushing to Raresh, one of his best pupils. Big medical volumes from Dr. Cushing's Boston were put on the shelves. Dr. Raresh was very attached to his family. He had been a naïve from an ideological point of view, a Christian and moral Communist, praying for God's help before he opened a patient's skull. He was too good, too much the correct doctor to make a Communist official. His daughter could not understand how he could have been so completely cheated. Enthusiastic when the Russian troops reached Bucharest, he went into the streets with roses for the soldiers. So did his wife. They lived to see the prison state, and had been sorry for that. He did not move into a villa like other ministers. His austerity was strange for his colleagues. Before he died, the regime named him ambassador to the U.S.A. but he did not live to go to Washington. They both had class." These people (the doctor's family) were no Stalinists. They were just unpolitical people who got into politics."(p.175)

CHARACTER PRESENTATION SAUL BELLOW – THE DEAN'S DECEMBER

Valeria, the old woman was not a Party member anymore, and had not been one since, following her late husband (1946) in the highest medical position - as Minister of Health in Ana Pauker's government, she fell in disgrace, thirty years before 1977. She was then excluded from the Party, threatened with prison, with death. They almost destroyed her, but she was very strong. She knew exactly how far she could go and so Doctor Valeria came through. She was "a superior, dignified woman" (p.81). She had founded the Party hospital herself. Pedagogy was one of Valeria's interests. Everyone in health care could remember her, she was a symbol: there was typhus, there was starvation after the Second World War. Valeria asked Truman for supplies and he sent them. Having requested drugs from America was one of her crimes (stated on p.184). She was rehabilitated in the fifties. Her pension was given back to her. She had never objected to the marriage of her daughter to Corde as she had too much common sense and education for that, and she was also very tactful.

She was a Communist but she could not get rid of the good old manners. She was also a Dubcek sympathizer. She was a very smart woman, but she was a romantic woman too. She had loved her husband, that was why she had become a Communist militant. She had loved her husband, loved her daughter, her sister. "When her husband died all that was left of him was in their daughter". (p.65) Her only pleasure in her old days was "going

out" (abroad) and have holidays in a civilized place and see her daughter and son-in-law and if the civilized place was London then buy colored postcards of Westminster Abbey for herself. As for self-respect she was the model for her daughter. She believed in the good. She "should not have a commonplace funeral. She ought to be exposed publicly in the great lobby of the Medical School as her husband was before her. It is only right to give her official recognition." (p. 184) says her sister. However, she was not given official honors. There were crowds of aged friends, colleagues, Party comrades, journalists who attended the funeral (the incineration) and paid their respects to Valeria.

Laura,III MG

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