11-1988

UWOMJ Volume 58, No 1, November 1988

Western University

Vol.58 No.1 Nov. 1988

The University of Western Ontario

Medical Journal

HEALTH SCIENCES CENTRE
U.W.O. LONDON, ONTARIO
CANADA N6A 5C1

From The Editors' Desk

Welcome to the first issue of the 1988/89 **Medical Journal**. With this issue the look of the **Journal** has changed. We have attempted to make the **Journal** more aesthetically pleasing and consistent in the way in which it is assembled. We like it, and hope that you do too.

The **Medical Journal**, in the past, has been many things to many people. Its' focus has been to publish original research material, to report on events taking place in the medical school, to be a forum for discussion of issues affecting physicians and medical students, and to publish articles on topics of particular interest to physicians. We plan to continue in that tradition. Prior to the past year, the **Medical Journal** was funded primarily by donations from the Hippocratic Council and the Faculty of Medicine. However, with the belt-tightening that has occurred with university budgets in general, the **Journal** budget was cut back significantly. In the last year, faculty physicians were solicited for donations, and the response was generous (and still welcome!). In the current year, we have actively sought advertising to support the **Medical Journal**, and plan to stick strictly to budget, while bringing you the best **Journal** that we possibly can. We hope that you enjoy reading it; we certainly enjoyed putting it together.

Connie Nasello Paterson
Warren D. Teel

Isolation is a problem for medical students, and indeed for hospital housestaff and physicians. Our cover this issue is apropo, depicting an individual locked in and pouring over a medical book, while the world goes on around. The fact is, however, the bars are of our own making. This point was made painfully obvious to me early this summer. In the spring, the finals coming on, I found myself getting more and more wrapped up in medical school, and less and less aware of what and who was around. It became all-encompassing. My husband was patient, he knew that I could relax for the summer. I put off visiting my family for several months because of all the commitments. When exams were completed, I spent the weekend working on a research project, with a plan of visiting my parents the following weekend. That was not to be. That Sunday night I received a telephone call that my father had died suddenly.

The next few weeks were nightmarish, with much recrimination. I found myself, however, at times behaving with strictly clinical detachment. My family is very large, and my father had many friends and associates. Since I was in medicine, they all looked to me to find out the explanation. So I spoke to the family doctor and the hospital. My father had had a sudden subarachnoid hemorrhage from a ruptured aneurysm. Having had relevant neuroscience lectures, I was able to explain what had happened to my family.

What is the point of all this? Well, clinical detachment is fine, it acts as a protective mechanism; you act and react automatically. However, it is also a way of not dealing with emotions. I also realized that because of my isolation and preoccupations with medicine, I had virtually ignored someone who was very important to me. It is too late for me to turn the clock back and spend that time with my father. But my message to you is to realize **now** that there is indeed life outside of the bars that we erect around ourselves. We have family, friends, there are things that may only happen once in our lives. Take the time out now to enjoy them . . . before it is too late.

Connie Nasello Paterson, Meds'91
Editor

Last February a councillor from the medically-underserviced town of Dutton expressed an opinion in the London Free Press which stated that new medical graduates should be "forced" to work two to three years in a rural community, before being able to begin practice where they wished. This opinion expresses how public attitudes towards the medical profession have changed. It also reminds me that we can't afford to be ignorant of the issues affecting the system in which we will practice, nor abrogate our responsibility and right to influence that system's future.

It is understandable why attitudes changed: the government, in 1966, began paying doctors bills. It made billing easier. It made a physician's services attainable to all. It also was the first wedge driven in the doctor-patient relationship. Prior to OHIP if someone didn't pay, the doctor had to sue, write the fee off, or make some sort of "arrangement" with the patient, recognizing his/her financial position.

Perhaps billing patients directly required, and engendered, a more responsible and compassionate physician. This was, after all, back in the legendary days when the doctor was seeming all things and more. Many of these attributes are undeservedly ascribed to medical students today when we are seeing patients. We take advantage of something that is not yet truly our own.

But, the relationship has changed: The wedge has been driven deeper. It probably began in the 60's, when all pillars of society were toppled and never did stand quite the same again. Technology, perceived by the public as being more important (and hence doctors less important), can also be identified as causing changes in attitude. However, one can't help but feel that if doctors were still autonomous no one would dream of suggesting they be "forced" to go hither and yon.

Doctors today are no longer masters of their own destiny. This was probably true the first day the government became responsible for paying the bills, it just didn't become solidified in the public's mind until the Bill 94 debate and subsequent strike. This was when the fading memory of the kindly old salt-of-the-earth country doc finally gave way to growing images of a less sensitive, more selfish type, not incapable of abusing the system. The media poured out stories supporting this, to the politicians' giddy delight, while the striking physicians reloaded and blew more holes in their feet. This iatrocide was over much more than Bill 94 - it was a fight over who was in charge. The problem was that the battleground, Bill 94, was the wrong one on which to fight a war. There was also something very important forgotten: while politicians don't know much about health care, they do know how to manipulate the issues, the media and the public to prolong their stay in power. With Bill 94, they couldn't lose.

So it's probably not surprising that people have started to talk in terms of "forcing" us to do this or that. My problem is that I went into medicine for the same idealistic reasons that most people do. I have spent far too many days and nights with my maxillae buried in books I can't afford, and will likely continue to do so throughout my life - a life which will seem at times like it is not my own. This we all do with the ridiculously naive belief that we will do some good.

But, when people start using words like "forced" my attitude takes an abrupt change. I start getting very hindbrain about the whole thing. Visions of dragging my books, my student loans and my receding hairline off to North Overshoe to practice go out the proverbial window. **Choosing** to be altruistic in the tradition of many of our predecessors is one thing, being **told** to do so is quite another. This is when I begin to resent the commitment I have made. I can't help but feel that this at least partially explains how our attitudes have changed, and may continue to do so.

When people begin to feel that they are just a cog in the system, they stop caring about the job. Individual effort becomes unrewarded and unimportant. When people feel victimized by the system, they revolt. Maybe this helps to explain the shift in graduates' concerns from the type of doctoring to the type of lifestyle afforded by the specialty. Motivation and initiative suffer as the system becomes more inflexible and autocratic. My concern is that if we allow further government interference (making political decisions as politicians are wont to do) in our profession and health care, we will see further deterioration in our morale and devotion as practitioners. This all has one final common pathway: insensitive, non-progressive or possibly regressive changes in health care for the individual. One need only look as far as Britain for evidence of this kind of degeneration (see Alistair Ingram's article on p.6).

continued.....page 3

Admission To Ignorance: A Commentary The Key To New Knowledge.

by Dr. J.D. Spence

Medical students (particularly in the ICC, it seems) are so overwhelmed with the amount of information required to be a physician that they sometimes lose sight of the value of ignorance. The late Dr. A.C. Burton, known affectionally by the students as "Bushy" because of his extremely impressive eyebrows, used to say that he much preferred first year medical students to senior medical students, because the first year students were willing to ask "dumb questions". What he meant by this, I think, was that later on in medical training, young doctors-to-be have a feeling that they're supposed to know so much, that to ask a question is to admit ignorance, and ignorance is somehow unforgivable. The first year students, on the other hand, who are expected to know nothing and learn everything, can be forgiven for asking a seemingly naive question. The reason Dr. Burton prized the naive questions was that they came from a perspective not yet jaded by the current paradigm. Paradigm, a ten dollar word if there ever was one, basically means the current ruling dogma into which all thinking must fit, or risk being rejected as heresy. It is clear now from the history of science that great leaps forward occur when new ideas outside the paradigm are shown to be feasible and then true, leading to a "paradigm shift". In this sense, informed ignorance - that is, the realization that one does not know something, and that something which is not known is worth finding out, is the whole key to new knowledge.

It turns out that not only in science, but also in the care of patients, the admission of ignorance, which might also be called intellectual honesty, is a vitally important key to your patient's welfare.

In the therapeutics course manual there are two little homilies that might be perceived by some students as overly folksy admonitions to someone as exalted as a clinical clerk. The first is the advice that all hospital wards have their own particular routines, and they have been in effect long before the clinical clerk arrives, and which will be in effect long after the clinical clerk leaves. It is much better for a clerk to simply accept and live with the quirks of a given ward, than to try to change the way things are done to some "better way" that is based on either previous experience or on superior intelligence. This advice actually came from my mother, who was a nurse, trained at the Toronto General Hospital. When I was but 15, doing a summer job in our local hospital in northern Peru, she tendered the following advice, looking ahead to my internship (she didn't know that I would be turned down from medical school so many times in the interim)!

continued.....page 5

Editorial.....(continued)

It seems that we are at a truly pivotal point in time with regard to health care in this province, and the country. So it is more important than ever for us as doctors and doctors-to-be to look very hard at where we have come from and where we want health care to go. The government can often count on us to be too involved with our studies and work to worry about the intricacies of Ministry of Health policy. It is my hope that we will become more involved and assertive, exerting some of our much-lauded intelligence and tenaciousness toward "forcing" bureaucrats to make more than politically expedient decisions. We need to gain more control ourselves over a system which literally equates human suffering with dollars and cents.

Ultimately, we are the ones who sit on the other side of the desk, explaining to the patient why we "can't", "it's unavailable here" or "you're on the waiting list . . ."

Warren D. Teel, Meds '90
Editor

Letters .....

It has come to my attention that recent issues of the Medical Journal have been shorter and filled with short essays on such topics as "What It Means For Me To Be a Med Student" or "My Year As a Med Student." While interesting to the party writing the essay and perhaps to close aquaintances, they have little relevance for the med student body at large. Enough introspective navel-gazing I say! Print only those few letters which have entertainment value.

The Medical Journal has served historically as a forum for debate on current issues (which I am pleased to note has not changed) but also as a yearbook with each issue reporting on various events during the year eg. tachy, med's pubs, relay, vaccinaid etc. The Journal should act as the newsletter for these events, eg. with the vaccinaid project there should have been a report describing the events and circumstances which transpired in Haiti, not just the experiences of individuals (although these certainly had their place as part of the overall reporting on that event).

Past issues have also contained more photographs, and I was recently approached by members of previous years who relayed how they had kept their various issues as chronicles of their progress through med school. Class historians should perhaps be approached to donate photos.

Regarding the inclusion of original research papers . . . these do lend an air of legitimacy to a publication exclusive to the Faculty of Medicine - but who reads them? How about abstracts instead? (One paragraph - large letters for the title etc.)

Finally, how about including short articles of clinical teaching contributed by staff consultants in various hospital services. I am sure some doctors would be willing to contribute a short dissertation on a topic of their interest, and students would find it useful.

Tom Song, Meds '89

Med Outreach '88: The Nigerian Experience

by Steve Beamish, Meds '91

It was the final day of our stay in a village in northern Nigeria. There was to be a photograph taken of the two Canadian medical students with the health staff of Michika Local Government Area. When the time came, however, it was much more than that. We were given ceremonial robes and hats. There were speeches; the Head of Health hoped we would be ambassadors for Michika in Canada. Then he thanked us. We had just been the recipients of 6 weeks of incredible experiences and the kindest treatment by virtually all the people of the area, and we were being thanked.

There is an organization at Western set up by Medical and Nursing students called MedOutreach. In previous years students were sent to Haiti to participate in immunization blitzes and the like. It had provided these students with a very real "third world" health care experience. It also provided some very real children with a means of protection from the immunizable childhood diseases. There was something very appealing about the whole concept.

For political reasons, the group didn't go to Haiti this summer. Instead, a deal was struck with CUSO to have 4 students placed in Nigerian villages. The postings wouldn't involve actually giving needles, and specifics of day-to-day activities weren't exactly known. They would, however, involve both observing and participating in primary health care settings. To be honest, I didn't really know what primary health care was until about a day before I applied to go to Africa.

The ideas behind primary health care are really very simple and logical. They focus on addressing root causes of disease (like unsafe drinking water) and community participation in treatment and prevention. Apparently, 80% of third world diseases are preventable by relatively uncomplicated means. If a mother is taught to make and give her child a sugar-salt solution for diarrhea, the child will not become dehydrated and die. Though this may seem a dramatic simplification, the reality is that this solution (called oral rehydration therapy) does work, yet today 400,000 will die because of not knowing about it.

Steve Beamish, Meds '91, weighs a malnourished infant as part of his case study.

Concepts and statistics can admittedly be somewhat dry. The beauty of being in the environment was that one could see the ideas in action. Every Wednesday at the Michika Health Centre around 40 mothers would show up early for Maternal and Child Health education. They would gather on benches outside with their babies on their backs waiting to learn. Soon a couple of women from the nutrition area, or one of the midwives from maternity, would begin to speak. One day, it was on continuation of breast feeding for as long as possible. On another, it would be about diet or monitoring their child's growth.

The growth monitoring days at the unit were exciting. One of my fonder memories was weighing 72 babies one morning, while my colleague recorded the weight, and another plotted it on a growth monitoring chart that was kept by the mother. The pride the mothers displayed when their children were healthy was moving. The weighings also tipped off the staff to malnourishment sometimes serious enough to merit admission.

Part of the MedOutreach experience was to follow a child admitted to the unit as a sort of case study. Through a translator, one could learn of the conditions of the home, the level of understanding possessed by the mother, and in time, the explanation for a given child being malnourished.

My first case study was a tiny boy aged 1, who refused to eat. The mother was pregnant again and had prematurely weaned him off of breast milk. In the nutrition unit we watched him for 3 days either refusing food or not keeping down that which he did eat. He was very definitely worsening. As a last ditch effort, a nasogastric tube was sought. Someone found one with Japanese writing on it. Who knows where it came from? The lone staff member who felt competent with it inserted it and some food was given. The child hated it, but the food stayed down. Whether it was the healing effect of the nutrients or the memory of the tube insertion, I am not sure which, the child began to take food by mouth the very next day. We were encouraged by this. Soon the child's symptoms began to disappear. The upcoming days would hopefully give the staff more time to educate the mother to prevent a recurrence. It was a cold dose of reality to come in one day and find that the mother had left in the night with the still sick child. Would the cycle repeat itself? Had anything been learned? It's hard to know. It's also hard to blame anyone. The mother was probably needed at home to work on the farm. The money for food and medications in the clinic may have been too high.

The compound containing the nutrition unit also housed a maternity ward and an outpatient clinic. I spent a fair bit of time at maternity with the midwives. They were experts in their field, and the doctor would often defer to them. I remember picking up one chart of a 20 year old on her eighth pregnancy. Family planning is more a goal than a reality in many of these places.

Brent MacMillan, Meds '91 (seated right) observes immunization clinic at Bokka.

A final big focus of primary health care is immunization. We lived with a CUSO co-operant and it really seemed that CUSO was making a real contribution here. Their program is called Immunization Through Community Education and Mobilization. In reality it sets up a system that teaches teachers. Ultimately, someone from the village whom everyone knows and respects is able to explain the benefits of immunization in a completely relevant and appropriate way.

One morning we trekked to a mountain village called Bokka. There are no phones or any electricity in the village and yet more than 100 mothers showed up with their children this day.

There are many more stories about health care and Michika that won't be written here, but will not be forgotten. The Head of Health had wanted us to be his ambassador. I felt honoured to hear that. As an observer, I saw a lot of positive things that left me fairly optimistic. Things **do** improve: some very slowly and a few a lot faster. Several of the individuals moved me. The woman who had built the nutrition unit was a devout Muslim who drove around on a motorcycle giving health talks in smaller villages, but still running her unit in Michika. I asked her what she needed. I had thought a fund for eggs in the unit would be a good idea, so her answer surprised me at first. She wanted a megaphone to reach more people in her talks. She wanted a camera to take slides of cases to show other mothers. Finally, she wanted a generator so that she could show the slides where she went. She had given me a primary health care answer. Make the kids better by not letting them get sick. I think I understand now.

The goal of MedOutreach is to send more students next year, and maybe enough money (only about $700 Canadian) for the request to be answered. I guess I'll close with a plug: Any donations are tax-deductible.

She said "when you're an intern, and you don't know something, ask the head nurse. You should do this for two reasons: Firstly, she will know the answer because she has been there forever. Secondly, if you show that you know enough to ask her, and are not too proud to admit your ignorance, she will reckon you are a sensible fellow, and from this you will derive at least two benefits: The nurses on the ward will take better care of your patients, and they will call you less often in the night, so you will sleep better!"

That advice stood me in such good stead during my clerkship and internship, that I became an observer of the phenomenon of being "too proud to ask". Very early on, being a somewhat proud (many would say arrogant) person myself, I learned this lesson the hard way. One, in particular, that took a few tries to learn, was the lesson about pride in my knowledge of pharmacology and therapeutics: this led to the second bit of advice in the therapeutics manual pertaining to phone calls from pharmacists. I used to bristle when a pharmacist phoned to question a prescription or an order that I had written, until I realized that one day, one of those phone calls would very likely save me and my patient from a mistake made in haste or ignorance, and I have since tried to always remember to thank the pharmacist for checking, and reassure them that on this occasion I really did intend to order something unusual.

As a neurology resident, I observed pride of knowledge, which I came to recognize as a form of medical machismo, in the form of patients arriving in hospital with their condition worsened by a diagnostic test that should not have been done. We used to see, in the days before CT scanning, about three patients a year who arrived in the hospital in a state of decompensation that was a result of a lumbar puncture done in the presence of a brain tumor. In trying to understand why the referring physicians would make such a terrible boner, I came to realize that they were worried about having "egg on their faces", that they perceived would be the result of their sending a patient, referred as having a brain tumor, to a teaching hospital without first proving that the patient actually had a brain tumor. This implied that they felt the need to establish the diagnosis for which the patient was being referred before referring the patient, that they had a need to be seen as all-knowing.

Among my many prejudices is my suspicion, that in general, women are better doctors than men. I suspected this on the basis of my observation of the referring patterns of women doctors, who I believe in general, suffer less from pride of knowledge than do men. That is to say, I believe they are better able to put the interest of their patients first, and if they don't know something or are not sure of it, they seem more comfortable with picking up the telephone to ask a quick question about a therapy or diagnostic test, secure in the knowledge that part of the consultant's job is to respond to such questions without the need for a referral. I fear that men are more likely to feel that such a question is a dreaded admission of ignorance, and they are more likely to go ahead and prescribe something or order a test which is inappropriate, on a trial basis, rather that checking it out first. It is a shame, really, since Alexander Graham Bell clearly invented the telephone so that doctors who are willing to admit their ignorance can call and ask questions that are important to their patients, rather than taking a rough guess at a correct answer.

I have a similar suspicion, but perhaps based on less observation, that women doctors are more likely to exhibit the attributes of a physician, as opposed to a specialist. As defined by my physician wife: a specialist is a doctor, who upon receiving an abnormal lab test confirming that his patient has a dreadful disease says: "Ah Ha! I was right, Mrs. So-and-so does have the dreaded disease". A physician on the other hand says "Isn't that too bad, Mrs. So-and-so has the dreaded disease". I believe that difference is an extension of the same principle that demands that good physicians who admit their ignorance, are acting in the best interest of their patients.

I seems to me that recognizing when one doesn't know something is an extremely valuable mental skill. When you don't know something, it's (a) because you don't know; or (b) because it isn't known. If it's the latter, the realization that it isn't known is the first kernel that will grown into new knowledge. So, when you don't know: -recognize it - ask about it - if it's known, now you know it - if it isn't known, figure out a way of finding it out. (This is what research is about).

With some practice, the admission of ignorance can be an extremely valuable tool. When you've mastered that one, then try working on the really tricky one: the realization that some of the things you think you know aren't really true - that's where paradigm shifts begin!

Through Our Eyes: A Canadian In Britain

by Alistair Ingram, Meds '90

Our Nightingale ward has a vaulted ceiling, and when the lights are dimmed at about 11 o'clock a hovering blackness is created, the same blackness that has been created this way for a century and a half. We have a small reading-light on the desk in the centre of the ward, by which we see three newly-arrived casualty reports. The House Officer is doing her best to ignore them by concentrating on a box of Black Magic, attempting to discern "the nutty ones" in the half-light. Distant echoes of stentorous breathing fall regularly from the blackness, and I ask the old miner if his oxygen mask is adequate. He nods, and quietly coughs, putting the black sputum in a cup. Quiet murmurings of feverish and toxic patients sift along from the far end of the room, where two gangrenous feet await long-overdue amputations. The Night Sister brings some tea, and inevitable whispered discussions of politics and romance ensue.

On July 5, Britain celebrated 40 years since Aneurin Bevan visited a young girl with pyelonephritis in a Manchester hospital and proclaimed her the first patient of the new National Health Service. Four decades later, it has become the guardian and lifeline of a nation, often said to be the world's third largest employer, after the Red Army and the Indian Railways. However, the very foundations of this social monument are being shaken with the same vigour, and the country itself is being torn apart with the repercussions. The media has reported a shocking decline in "standard of care" over the past few years, the root of which is generally perceived to be underfunding by the present Conservative Government, whose claim is that NHS funding has kept pace with inflation. However, as many insiders tersely point out, technological advances do not have the same tendency. Furthermore, many of the old Victorian hospitals have reached the end of their life-spans, and replacement monies are not forthcoming.

The Leeds General Infirmary is a case in point. Blackened by years of smoke and soot, it was born and grew with the Industrial Revolution. As it grew, it sprouted new wings and branches, until it was deemed necessary to replace it in the 1950s. The money has never been allocated, and new wings continued to sprout, so that now it is a monster past all destruction, some thousand beds spread over half of West Yorkshire.

There is hidden unpleasantness here, not least of which is the practice of "ward redecorating". At the LGI, at least four or five wards are constantly being "redecorated", but these beds, unusable, do not disappear off Government lists of hospital beds in Britain. Redecoration seems to be a very long and laborious process; indeed, the ward next to us has been under the painter's brush since 1986. An extraordinary cynicism has been created here, and all staff seem to agree that someone has much to answer for.

The wait is long for numerous procedures. Open-heart surgery is unavailable; the department's budget ran out in June, and the administrators refused additional monies. Only patients independently assessed as emergency cases will be operated on - in practice, this means 24-hour pain. A lady in the next ward has blown her implanted mitral valve completely. She is not yet, however, in congestive failure. She will not be operated on.

Despite this, most consultants believe the NHS standard of care is the best available in the country. The feeling is that private medicine is fine for minor problems, but the care is simply not as good for major medical problems. Indeed, a recent report, independently published, stated that the "standard of care" (based on numerous parameters) was higher in Britain than France or Germany, despite the fact that the latter two spend much higher proportions of their respective GNPs on health care. The general consensus is that the NHS is remarkable for its level of funding, but that improvement could be bought, if the will was present.

By all appearances, though, the will is not present at Westminster. The chaplain at the LGI held an NHS "40th anniversary wine and cheese gathering", and spoke upon the "bleeding of our health service", in most direct terms. There is real feeling here that the whole monumental system could actually collapse, with cutbacks proceeding at a record rate, and Mrs. Thatcher talking ominously about "hospital competitiveness". Her personal heading of a commission to look into the problems of the NHS has been compared to the bull heading the inventory team at the china shop. The chaplain's most fervent prayer was that he would be able to preside at a 50th birthday.

At one o'clock, the old miner's raspy echoes no longer float down from the blackness; he was certified half an hour ago. Two of the more able patients try to comfort the toxic gentlemen, whose mumblings continue. There is a marvelous sense of camaraderie on these Nightingale wards, and all are shook by the passing of the miner. There is also, however, an incredible stoicism and tangible will to live amongst these men, some of whom are nearly as ill as the land about them, a skeleton razed by the Industrial Revolution, and ignored since. Generations of dirt and soot cover a green and pleasant land.

We are not on "take" the next evening, so we go to a pub, the bastion of English life. The regulars are there, discussing sport or politics as they have every night for decades. The amount of alcohol consumed by a British working-man is frightening. A Welshman, inexplicably visiting Leeds to look for work approaches us and begins to profess his viewpoints. He confides in us - "they should do to her what she's done to this country - tear her bloody heart out".

Through Their Eyes: A Brit in Canada

The author is a third year medical student at Newcastle University, England who just completed a 3 month elective here in London

by Andrew Fall, Meds '91 UK

The practice of medicine in London does not differ greatly from that in Newcastle in terms of aims and approach, but there are certain practical disparities. The most immediately noticable of these is the much greater amount of money available for health care in Ontario. In the emergency department at home we do not have the luxury of a mains-operated ophthalmoscope and otoscope in every cubicle. There are probably two or three battery-operated ones, which, although need carrying from room to room, are usually sufficient. At busy times it is not uncommon to see people on trolleys in the waiting area, as there is insufficient space to cope with everyone. Waiting times too are often very protracted in the U.K. I have heard patients in Victoria Hospital complain vociferously about the gross injustice of having to wait 40 minutes before being seen. In most casualty departments in England you can consider yourself lucky if you are seen inside an hour - and it's often much longer. I can remember waiting 4 hours to be seen for a foreign body in my eye; and that was on a Sunday evening. Despite this, however, the general public in England are much more tolerant than I find the Canadian patients. They are generally happy to accept the doctor's opinion without demanding a detailed analysis of how he/she arrived at it.

British patients are also far less litigious than Canadians. Of course, if a doctor has been truly negligent then a lawsuit will often ensue, and indeed doctors should be accountable for their practices. But patients do not use the threat of legal action as a weapon with which to attempt to manipulate their physicians. Consequently, there is less of a tendency to

continued.....page 7

over-investigate patients in Britain than there is in Canada. I think that the differences in patient attitude are largely related to the level of awareness of individual people. Of course there are exceptions, but I have found Canadians much more aware of the nature of their illnesses than their English counterparts. As an example, I have not encountered more than half a dozen Canadians who do not know what medications they are taking. In England, it is not uncommon for people not to know even why they are taking certain drugs, let alone what the drugs are called. Since they are better informed, Canadians are better able to discuss the therapeutic options available to them with their doctors. However, with this comes a higher expectation of care, and an increased tendency to blame failed regimes on the doctor. Sometimes this blame is justified, often I feel it is not.

There are noticeable differences in the medical education systems of our two countries. For a start, any university course in the U.K. is free, including medicine. I pay no tuition fees and I even receive government aid, with day to day living expenses in the form of a non-repayable grant. This fact I think goes some way towards explaining my observation that most medical students at U.W.O. are considerably wealthier than m y classmates at home. Financial status, at present, is no barrier to higher education in Britain; I suspect it is in Canada.

We start medical school at 18 years of age, entering straight from high school into a 5-year programme. Entry is largely dependent on achieving suitably high grades in national examinations known as 'A' levels, and on convincing an admissions committee that you will make a better doctor that the other 20 students competing for a position.

Once in medical school we have 2 years of basic anatomy, physiology, biochemistry etc., followed by 3 years of clinical medicine. The first two of these final three years are spent half in hospital and half in systemic lectures on clinical medicine. We spend mornings on the wards and afternoons in class. This has two distinct disadvantages. One is that you may well be on an orthopaedic attachment is the mornings and find yourself being lectured on schizophrenia the same afternoon. The second is that, not being on the wards all day, follow-up of patients is almost impossible, and you often have to decide between attending your patient's operation and going to the lecture on schizophrenia.

Our 'clerking' year is the final year, when we are responsible for admission and follow-up in much the same way as clinical clerks at U.W.O. The rationale for leaving this to the final year is that by then we should have enough knowledge and experience to do the job reliably. The disadvantage is that by the time you have spent four years at the bottom of a large pile, disillusion and disenchantment are sometimes deep-seated. The system in London of starting clerkship immediately after passing the basic medical sciences courses is appealing because a student really does feel as if he/she is almost a doctor, particularly since clerks here are often "first on", albeit with back-up. In Newcastle the person on call is a first year resident - interns (let alone clerks) are not deemed sufficiently experienced. It would, however, be very easy to fool oneself that one was a 'real doctor', and to get an inflated idea of ones' own importance. Suffice it to say I have not encountered this among any of the students I have worked with. You've all been a fantastic bunch and I've been very impressed with the level of knowledge you possess. I have been shamed by my ignorance on several occasions.

Once again, thanks for a thoroughly enjoyable time, and for a most educational elective. I wish you all the very best for the future.

Dr. Richard Maurice Bucke: Physician, Psychiatrist, Philosopher Extraordinaire

by Kenneth C. McLellan, Biology IV

This man experienced more before the age of 20 than most people experience in a life time! His fortitude in surviving several life-threatening situations seems to have continued throughout the rest of his life, as he attempted to unravel the secrets of Insanity and of the Cosmos.

Richard Maurice Bucke was born in Methwold, Norfolk, England on March 18, 1837. His father, Reverend Horatio Bucke, was an Anglican clergyman who had received his M.A. in 1828 from Trinity College, Cambridge. Reverend Bucke was an outstanding scholar who was proficient in seven languages. Horatio was a direct descendant of Sir Robert Walpole, first Earl of Orford, and Prime Minister of England from 1721 to 1742

In 1838, Reverend Bucke emigrated to Canada and bought a farm three miles east of London, very close to the site of the present London Psychiatric Hospital. Maurice was one year old at the time of the move. Maurice never attended school. Instead he worked on the farm and read widely in his father's magnificent library of several thousand books. His father also taught him Latin. Horatio later said, "It is an interesting question whether he would have done more and better work or less and not so good if he had had a regular school and college training. In other words, do the schools give to the growing boy more than they take out of him?"(1)

Maurice's mother died in 1845 when he was seven years old. Reverend Bucke remarried and continued living in London until the death of his second wife, at which time he moved his family to a farm at Corunna, Ontario. Maurice did not go with them. He later wrote, "When only a few years old I lost my mother and shortly afterwards my father. Affairs at home went badly for me. I was ill treated and early in '53, being only sixteen years old, I made up my mind that I would live elsewhere"(2) The truth of the matter was that Bucke's father had not died when he left home at the age of sixteen, but rather in 1856 when Maurice was nineteen years old. In pursuit of a new life, Maurice crossed Lake Erie to the United States; here he worked for several years as a gardener, hired hand, and deck-hand on the Mississippi and Ohio Rivers until he reached Fort Leavenworth, Kansas. There he signed up to work for five months as an oxen driver on a wagon train to Salt Lake City. Bucke joined another wagon train in Salt Lake City bound for Gold Canyon on the eastern side of the Sierra Nevada Mountains. Foolishly, the four wagons left separately, with an interval of several days between each departure. Bucke's wagon was attacked by 100 Soshone Indians and three of his companions were killed. Luckily, the Indians gave up just as Maurice's party loaded the last bullets into their guns. They were then forced to travel several days without water.

Bucke took up prospecting in Gold Canyon, where he met the two Grosh brothers - Allen and Hosea. The Grosh brothers made the first discovery of silver on the eastern side of the Sierra Nevada Mountains. Hosea Grosh died of blood poisoning from a pick wound to his foot. This delayed their departure for California. On November 26, 1857, Bucke and Allen set out to cross the 11,000 foot Sierra Nevada into California to register their claim. They were caught in a blizzard and lost the trail repeatedly. When their rations became depleted they killed their donkey for food and carried the meat on their backs. They had no matches so they started a fire using their gun. At night, they wrapped themselves in blankets and piled snow on top to keep themselves warm. The terrain was so steep and the snow so deep that they had to crawl on their hands and knees. They threw away their claim papers and all other belongings. Bucke said, "I sat down, weeping, proposed to give up and lie

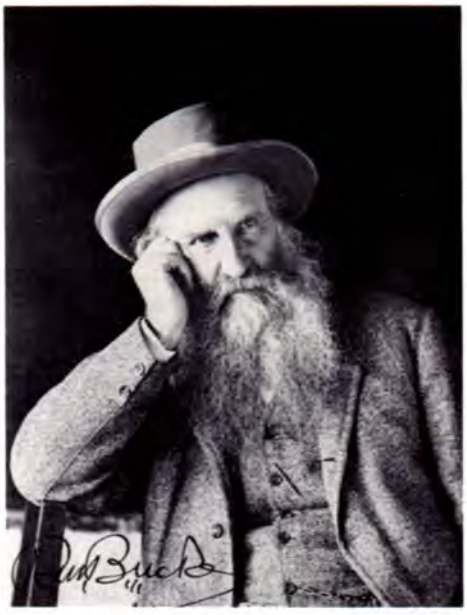
continued.....page 9

down and die where we were, he (Allen) would not consent to it, but said, 'No, we will keep going as long as we can walk.'"(3)

On December 18th, they discovered a mining camp, most ironically named the "Last Chance" mining camp. Bucke said, "Then I felt certain that our troubles were over. This was the worst delusion of all. Our troubles had just begun."(4) Neither man could eat, and Allen died 12 days after their arrival. Maurice's feet were severely frozen, and he had made the mistake of warming them by the fire each night on the trail. Eight days after his arrival a doctor came to the camp and amputated Bucke's feet, ". . . the right one four inches above the ankle-joint, and the left at the tarso-metatarsal articulation."(5) He said, "I was born again, it cost me my feet - yet it was worth the price."(6) The miners nursed him until he was well enough to return to Canada in 1858. His wounds never completely healed. Forty years later bits of necrosed bone were still being discharged. Bucke was remarkable in that he never complained of his affliction.

In 1860, at the age of 23 Bucke entered McGill University Medical School. He funded his education with the money his mother had left to him. Maurice wore two prostheses so that, "Nobody suspects that there is anything the matter with me but a little lameness. (7) Bucke chose McGill because two of this brothers had studied medicine there. The medical program at the time was two years long. Classes began at nine in the morning, and ended at eight in the evening; then followed the dissecting of cadavers until ten o'clock. In order to graduate one had to pass all the final (oral) examinations, work in the hospital for one year and submit a thesis. Bucke won the Professor's Prize in Clinical Medicine for his accurate reporting of cases, and the Govenor's Prize for the best thesis. His thesis was entitles, "The Correlation of the Vital and Physical Forces", and was published immediately in the British American Journal. After graduation, Dr. Bucke went to England and France for one year of postgraduate study. It was in London where fellow students often hid his cane on him as a joke. This trick rendered him almost helpless.

Dr. Bucke returned to Sarnia, Canada, in 1864 to take over the medical practice of his recently deceased brother, Edward. On September 7, 1865, Dr. Bucke married Jessie Maria Gurd of Sarnia. Maurice settled down in Sarnia to build a successful general practice and to begin his family of eight children. In 1876, he was appointed Medical Superintendent of the Hamilton Asylum. The Asylum has just recently been completed and Dr. Bucke received the first patients on March 17, 1876. A year later he became Superintendent of the London Asylum, a position held for twenty-five years until his death in 1902. In the first year Dr. Bucke remarked, ". . . I am persuaded that the use of mechanical restraint variously applied to meet the requirements of particular cases is the most useful and least disagreeable, the cheapest, and least injurious of any form of restraint that can be used. And as for non-restraint, I do not believe it can be or ever was practiced. . ."(8) Soon after his appointment in London, he ordered six restraint chairs and six crib beds for the already restraint-laden institution. Dr. Bucke eventually came to realize that restraint was not the best method of controlling the patients. He came to depend



Dr. R.M. Bucke - Courtesy of Special Collections, University of Western Ontario.

more and more on kindness, hygiene, fresh air, exercise, work, amusements, and good diet. Dr. Bucke said, ". . . work is the most valuable because it, more than anything else, compels the mind to take cognizance of real existences - actual facts."(9) In 1883 Dr. Bucke became the first superintendent of an insane asylum in North America to completely abandon restraint and seclusion. He remarked, "I have come to the conclusion that, in a large number of cases, it is restraint itself which makes restraint necessary. That a patient is restless or violent means that part or all of his nervous system is morbidly irritable or mobile. To put such a person in a restraint chair increases this irritability, by preventing the movement which is its natural outlet and relief. . ."(10) Dr. Bucke also remarked on his change of attitude regarding restraint, "I was then young in the experience of the care of the insane, and, as is often the case with beginners, dogmatic in the inverse ratio of my experience."(11)

Dr. Bucke not only went against the bastion of restraint and seclusion, but also tackled the use of alcohol, which was given to insane patients as a medication several time daily both in America and British Institutions. In 1881 Dr. Bucke completely abandoned the use of alcohol, predicting that, ". . . it will be as rare for a physician or surgeon to prescribe alcohol, as it is now for either of them to prescribe blood-letting. . ."(12) As a young man Dr. Bucke did drink, but later in life he stopped drinking completely.

Dr. Bucke's aim was to make the asylum a self-sufficient community - quite a challenge since the asylum accommodated over a thousand patients. Most patients worked - be it in the kitchen, in the laundry, in maintenance, or on the farm. Thus, they grew their own food and crops, produced their own milk and dairy products, raised some livestock, with the exception of beef cattle, and even disposed of their own sewage by using the Intermittent Downward Filtration System which Dr. Bucke had engineers from New York install. He introduced concerts, lectures, dances, sporting events, and musicals for the patients and the staff was to participate in these activities with them. All patients who were able, and all employees, were required to attend weekly worship in the Chapel of Hope which Dr. Bucke had built on the grounds. To help remove fear and negative connotation associated with an asylum, the public was encourage to visit. Many of Dr. Bucke's theories and treatments considered radical in his time are now acceptable practice.

In 1890 an infirmary was established on the fourth floor of the main building at the London Asylum. This was used to surgically correct any ailment that required such treatment and turned the Asylum into a Psychiatric Hospital. Dr. Bucke felt that to be healthy in mind, one must first be healthy in body. Systematic Gynecological Surgery began in 1885. Before this, most female patients were never given a complete physical examination. A Gynecologist was hired to perform the examinations and operations. Dr. Bucke was often accused of operating on these women with the idea that the operation itself would cure them. Dr. Bucke stated, ". . . we never in any case operate for insanity. We deal with our patients as if they were sane."(13) According to his records the recovery rate for females at the Asylum had improved by 16% after he introduced gynecological surgery in 1895. Dr. Russel attacked Dr. Bucke's preoccupation with female problems. "It is marvelous what attraction there is in operative procedure on the uterus and its appendages. Men not only seem to love to operate upon these poor organs, but love to discuss the subject as well . . . We do not hear of any such battle royal over the male organ and its appendages. . ."(14) Dr. Russel was obviously unaware of Dr. Bucke's procedure of "wiring". Masturbation was thought to be a cause of insanity. This theory was supported by the large numbers of single men that practiced this activity in the asylums. Dr. Bucke's "cure" was to insert a thin piece of silver wire into the prepuce, making it difficult and painful to masturbate. Only 15 patients were wired before Dr. Bucke abandoned this procedure as ineffectual.

Dr. Bucke was a man of great intelligence and energy. Besides his duties at the Asylum and his many writings on insanity, he read all the great poets and novelists, much aided by his knowledge of Latin, French, and German. He committed to memory many Shakespearian Sonnets, all of Whitman's **Leaves of Grass** and most of the works of Shelly! He had a vast knowledge of the Bible and quoted it widely in his writings.

On October 1st, 1883, the introductory lecture for the medical students at the University of Western Ontario was given by Dr. Bucke in Victoria Hall. The Medical Faculty had been in existence only since 1882. Dr. Bucke was one of its founders and he assumed the chair as Professor of Nervous and Mental Diseases. The Ontario Government refused to let him lecture at the Medical School, so the students had to come to the London Asylum. Before 1882, Western Ontario had no permanent medical school. Many cynics felt that Western would not be able to compete with the long-established medical schools in Montreal, Kingston, and Toronto.

In his address, Dr. Bucke declared, "These people say that we have no college buildings, no money, no museum, no library, no experience in teaching, and that it is absurd for us to try to compete with the old schools which

continued.....page 10

Bucke.....(continued)

have all these things; I say in reply that it is true that we have no buildings, no money, no museum, no library, and no experience but the same has been true of every medical college that was ever started in America, we have not these things now but we will soon have them for we have what will command them. Energy, ability, and a settled determination to succeed. . ."(15)

In 1879 Dr. Bucke wrote his first book, **Man's Moral Nature.** In 1883, his second work, **Walt Whitman**, was published. This was the biography of the great American poet, who was Dr. Bucke's most intimate friend. It was a hero-worship of epic proportions with Dr. Bucke collecting every item concerning Whitman that he could obtain. He felt that Whitman was the greatest man the world had ever produced.

In 1872, Dr. Bucke was illuminated. He had prepared himself for this cataclysmic event by reading Whitman's collection of poems, **Leaves of Grass**, over a period of several years. Dr. Bucke described his own illumination in his book, **Cosmic Consciousness**:

> "He and two friends had spent the evening reading Wordsworth, Shelly, Keats, Browning, and especially Whitman. They parted at midnight and he had a long drive in a hansom (it was in an English City). His mind, deeply under the influences of the ideas, images and emotions called up by the reading and talk of the evening, was calm and peaceful. He was in a state of quiet, almost passive enjoyment. All at once, without warning of any kind, he found himself wrapped around as it were by a flame-coloured cloud. For an instant he thought of fire, some sudden conflagration in the great city, the next he knew that the light was within himself. Directly afterwards came upon him a sense of exultation, of immense joyness, accompanied or immediately followed by an intellectual illumination quite impossible to describe. Into his brain streamed one momentary lightning flash of the Brahmic Splendor which has ever since lightened his life; upon his heart fell one drop of Brahmic Bliss, leaving thence forward for always an after taste of heaven. Among other things he did not come to believe, he saw and knew that the Cosmos is not dead matter, but a living Presence, that the soul of man is immortal, that the universe is so built and ordered that without any peradventure all things work together for the good of each and all; that the foundation principle of the world is what we call love, and that the happiness of everyone is in the long run absolutely certain. He claims that he learned more within the few seconds during which the illumination lasted than in previous months or even years of study, and that he learned much that no study could ever have taught."(16)

Dr. Bucke believed that there was taking place an evolution of a higher human race - a Cosmic Conscious race. One gained this new faculty through an illumination. Dr. Bucke listed forty-three persons known to have been illuminated. These included Jesus, Paul, Walt Whitman, Honore de Balzac, William Blake, Jacob Behmen, Francis Bacon, Dante, and Mohammed. According to this theory, the time when one is illuminated predicted how long a person would live. Dr. Bucke died at age 65, right according to plan. On February 20, 1902, he went out on the veranda to gaze at the stars through his field glass. He slipped on some ice, which caused him to fall and strike his head.

Anatomy class, McGill University Medical School, circa 1860. Dr. Bucke seated second from the left. Courtesy of Special Collections, University of Western Ontario

Dr. Bucke lived an abundant life, serving as a founding member of the Royal Society of Canada, President of the Pyschological Section of the British Medical Association in 1897, President of the American Medico-Psyshological Association in 1898, author, professor, general practitioner, and innovative psychiatrist.

Dr. Bucke's whole life was driven by his intense thirst for knowledge. He ended an introductory lecture to the McGill Medical

continued.....page 11

Bucke.....(continued)

School in 1891 by saying, "It is only yesterday that this vast meadow became ready for the scythe and so far only a few swaths of the good grass has been out. Take off your coats then and buckle to it. The labor is great but not greater than the reward. Resolve to achieve and you will achieve. Resolve to conquer and the victory is half won."(17)

Dr. Bucke has one surviving relative with the family name - a grandson, Mr. Harold William Walpole Bucke of Oakville, Ontario. At the University of Western Ontario is a great grandson, Dr. William McMurray, Chairman of Biochemistry.

(The research for this paper was made possible by the Hannah Institute for the History of Medicine, Toronto).

ENDNOTES

1. Bucke, R.M., FAMOUS EXPERT DIES FROM A FALL, Toronto Mail and Empire, Feb. 21, 1902.
2. Bucke, R.M., AN EPISODE IN THE LIFE OF RICHARD MAURICE BUCKE, never published.
3. Seaborn, Edwin. LIFE OF RICHARD MAURICE BUCKE. London: never published, circa 1951, p. 89 (Hereafter Seaborn)
4. Ibid., p. 89.
5. Ibid., p. 29. Coyne, James Henry, RICHARD MAURICE BUCKE, A SKETCH. Reprinted from the Transactions of the Royal Society of Canada, 1906. Toronto: Henry S. Saunders, 1923, p. 28.
6. Burgess, Thomas Joseph Workman. RICHARD MAURICE BUCKE, M.D. Reprinted from the Montreal Medical Journal, March 1902, p. 3.
7. Seaborn, p. 92.
8. Annual Report of the Medical Superintendent, London, 1877.
9. Annual Report of the Medical Superintendent, London, 1885.
10. Annual Report of the Medical Superintendent, London, 1883.
11. Annual Report of the Medical Superintendent, London, 1885.
12. Bucke, R.M., ALCOHOL IN HEALTH AND DISEASE, London: William Bryce, 1880.
13. Bucke, R.M., TWO HUNDRED OPERATIVE CASES - INSANE WOMEN, American Medico-Psychological Association Proceedings. VII (1900), p. 103.
14. Bucke, R.M., GYNECOLOGICAL NOTES. American Medico-Psychological Association Proceedings, III (1896), p. 155.
15. Bucke, R.M., Notes for Introductory Lecture to Second Session of the Medical School of Western University, 1883, never published.
16. Bucke, R.M., **COSMIC CONSCIOUSNESS** - New York: E.P. Dutton and Company, Inc., 1969, p. 9.
17. Bucke, R.M., THE VALUE OF THE STUDY OF MEDICINE. An Introductory Lecture to the McGill Medical Faculty on October 1891, London: Advertiser Printing Company, 1891, p. 4.

U.W.O. MEDICAL JOURNAL

This University of Western Ontario Medical Journal is published 4 times per year by the students of the U.W.O. Medical School. Established in 1930. Contributed articles, letters, photographs and drawings welcome. Submissions should be typewritten and double spaced. Correspondence should be directed to U.W.O. Medical Journal, Health Sciences Centre, U.W.O., London, Ontario N6A 5C1.

Editors:	Connie Nasello Paterson,	Meds '91
	Warren Teel,	Meds '90
Journal Reps:	Les Wright	Meds '89
	Warren Teel	Meds '90
	Barbara Heller,	Meds '91
	Peter Labruzzo,	Meds '92

1887-1987-2087

CENTURIES OF DISCOVERY

PARKE-DAVIS OVER ONE HUNDRED YEARS IN CANADA

PARKE-DAVIS ADVANCES INTO A SECOND CENTURY OF SIGNIFICANT DISCOVERIES

Parke-Davis has grown with Canada sharing pharmaceutical research and development discoveries such as: Adrenalin* (epinephrine HCl), Dilantin* (phenytoin sodium), Benadryl* (diphenhydramine HCl), Zarontin* (ethosuximide), Lopid* (gemfibrozil).

And the future looks even more promising. Parke-Davis is continuing to increase its investment in medical research both in Canada and on a worldwide basis.

We're working hard to find the answers to many of today's medical problems; antitumor agents to help the fight against cancer, cognitive agents to combat Alzheimers disease, antihypertensives and lipid regulators to help prevent cardiovascular disease. Research is currently going on to discover new drugs for schizophrenia, epilepsy, asthma, heart disease and infections.

As a demonstration of our commitment to Canada, we invest eleven and one half cents of every sales dollar and employ eighty-three people in research and development, right here in Canada.

Help us share a better Canada through innovative drug research in our second century of discoveries.

PARKE-DAVIS
Scarborough, Ontario M1L 2N3

INVESTING IN RESEARCH • INVESTING IN CANADA

*T.M. Warner-Lambert Company, Parke-Davis Div., Warner-Lambert Canada Inc. auth.user.