

February 1966

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### Recommended Citation

Mulholland, Philip (1966) "1,071 had a Hemoglobin of 7.5 Grams % or Less ...," *The Linacre Quarterly*: Vol. 33 : No. 1 , Article 16.  
Available at: <http://epublications.marquette.edu/lnq/vol33/iss1/16>

## 1,071 had a hemoglobin of 7.5 grams% or less . . .

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The medical missions provide a peculiar and very satisfying way to answer the basic motivation that has led a physician to choose the healing art.

A physician who has gained the awesome knowledge of restoring health to a certain number of his patients, realizes early in his career that he has an obligation to contribute a certain part of his life to those who cannot afford to pay. This obligation must be distributed equally throughout the profession. I really do not know of any physicians who have denied this and I know of no one who is not making some form of contribution to the less fortunate.

The Lord chooses how and when He wishes a person to do his share. The ways of the Lord are not to question once they are made known. So often what appears to be a hardship will in fact be a real pleasure in that we are fulfilling His Will.

We do have an obligation to have an open ear and to explore and consider whether various modalities conform to our particular situation in life. That is after we have given due consideration to our family and financial obligations. You may care to think of the fulfillment of your own obligation in the light of what can be done.

For this reason, it may be of some interest to recount my own personal experience in the missions. After

internship, completion of military service and one year of a General Practice residency, my wife and I realized we were in a peculiar situation to spend two years in the missions.

We knew there were poor in our own city and that there were other desperate sections in our own United States, but yet we felt that we could best do our part in the context of the Pope's appeal for Latin America.

On consulting the Catholic Medical Mission Board in New York, we were happy that the Church had given us this opportunity to seek out the fulfillment of this calling in the context of Her work which was begun by the clergy. This gave us the thrill of dedicating our work in the name of the Church. The Placement Service of the Catholic Medical Mission Board, with more than 100 requests on file for physicians, suggested that we serve in El Progreso, Honduras, at a clinic under the direction of the Jesuits of the Missouri Province.

We found ourselves in a city with a population of 14,000, with an additional 17,000 people in numerous peripheral grass hut villages. The United Fruit Company provided a fairly good standard of living and medical care for about 5,000 of these 31,000 people. This left us with a potential 26,000 people for whom to care.

The Honduran government had established some clinics for these

people but, nonetheless, the financial limitations and magnitude of the health problem were overwhelming. The shortage of drugs and difficulty in controlling sanitation were problems in themselves. But most impressive to me was the need for someone to get out and start treating patients. Planning is important, but there was a great need for someone to go out and see the patients here and now — the so-called "scout work."

Many people offered suggestions and many had prepared extensive and detailed protocols . . . but what about the people who were dying while these ideas were being implemented?

There was no difficulty finding patients. They came in great numbers. We were faced with the dilemma of giving rapid superficial treatment to a large number or attempting to focus on more careful management with some long term objectives. The two-year commitment was ideally suited. Likewise, we found that it was foolish to aimlessly hand out pills without examining patients, studying the stools for parasites, doing hemoglobins and other lab work when indicated.

The greatest problem was malnutrition. And this was complicated by intestinal parasites and chronic diarrheas and dysentery. This basic trial, accounting for a majority of our work among children, was not only challenging but exhausting. The management of this problem demands a careful follow-up with scheduled re-visits and a definite personal doctor-patient relationship.

Sometimes, it was necessary to interrupt our work two or three times in a day to start a severely dehydrated small baby on intravenous fluids. The mother would sit in as our "special duty nurse," and our trained Honduran girls would supervise. I had to check frequently all the details to ensure that the rapid dehydration measures in the first few critical hours were properly carried out as the babies were frequently already in shock. But even two or three hours of constant attention were not enough. The long, tedious task of re-alimentation while trying to titrate the tolerance of a traumatized infant, teaspoon by teaspoon, was often most discouraging. After two or three days of trial and error with sugar solutions, then skim milk, often it often resulted merely in delaying the demise of a child whose state of nutrition was already irretrievable.

For the early days of my experience in the clinic, I was faced with a strange situation. The people who had watched so many of these children expire in the past, had adopted an attitude of the inevitable. They knew before I did, when we had reached the point of no return.

These were not heartless mothers who did not love their babies. Indeed, they loved them so much that they wanted to take them home where they could exchange those last few hours or days of love between a mother and her child. For my part, I never wanted to stop trying. But I did learn to respect the will of these mothers when they wanted to take their children home to die. It

was a problem I had never faced in the States.

When I began to feel the impact of losing two or three children a week because they were unable to tolerate even the simple diseases like respiratory infection or diarrheas, to say nothing of the dreaded measles, tuberculosis and pneumonias, I desperately sought to incorporate some basic preventive medicine measures aimed at the most basic and obvious deficiencies which faced this specific group of people.

The most accessible deficiency from my standpoint was the iron deficiency anemias — or some prefer to call them the nutritional anemias. I decided to build up a treatment around them. During a period of twenty months, we had 5,222 patients visit our clinic; more than 90% were children. Using a rapid, easily adaptable Sahli hemoglobin determination, we found 1,071 had a hemoglobin of 7.5 grams% or less (465 were actually below 4.5 gm.%). Each of these patients were seen for an average of 3.2 patient visits.

The treatment of the anemia was merely the administration of simple iron therapy (ferrous sulfate), some of which we received from the Catholic Medical Mission Board and some we purchased in the States. As can be seen from the number of return visits, the treatment became only a stepping stone to seek out many of the underlying problems contributory to the anemia.

The plan of approach became clear as we went along. Soon we contacted CARE so that we could distribute skim milk during the course of our treatment. Followup

appointments took part of each day. We examined a stool specimen on each visit and, when our patients could tolerate an antihelminthic, we began this facet of treatment.

The Honduran girls working for us helped begin classes of instruction on sanitation and nutrition and eventually the Honduran government, through President Villeda Morales, contributed a movie projector to enhance our instructions. The U.S. Information Service (ISIS) made available their library of Spanish language educational movies — including an excellent animated film on hookworm by Walt Disney which we showed *ad nauseam* to the delight of all.

One thing was indeed impressive. When we maintained patient contact by offering a system of planned followup, we seemed to improve our success rate of those whose anemia stayed in remission. 70% of those who were treated over a three month period, did not return with anemia recurrence. Among the remaining 30%, some required repeated treatment for anemia and related diseases for 10-15 months.

We further analyzed our patients according to the kind of intestinal parasites and degree of parasitosis. When we plotted this against anemia prevalence, we noted that those living in the small grass hut villages (20-200 families), were more severely affected. Among those living in the city proper of El Progreso, 9.8% had anemia with hemoglobin less than 7.5 gm.%. Some villages were disproportionately high such as Guaymetas with a prevalence of 52.5%. Our figures showed the

hookworm prevalence paralleled the anemia rates.

Yet, by actual egg count in the stools, there was not a sufficient number of hookworm to account for the blood loss quantitatively. Which came first, the anemia or the hookworm? There were still many unanswered questions. We wondered if the high incidence of protein malnutrition (i.e. kwashiorkor and lesser degrees) might not be related. The world literature in Tropical Medicine likewise has many things unanswered.

Besides treating patients at our clinic, we visited neighboring villages one day a week. We went from house to house doing hemoglobins on all the suspect children, prescribing iron tablets and giving appointments to the clinic.

For the two years we were there, this method was very successful and a genuine therapeutic gain. It's so easy to raise a hemoglobin from 4 to 12 grams—and without the need of transfusions. The patients aged and became productive human beings.

Yet, more than 120 children under my care at one time or another did die; and we know how many anemias have slipped back without opportunity to count them.

The results of my small contribution are totally unknown. This is merely one of trying to offer what is within one's capabilities. Yet there is always that empty feeling that we should have done more. We can only pray that the Lord will continue to make known to us the way of fulfilling our obligation of our state in life. Once known, that we may have the courage to face it.

