

The Medical Clinic

The following information is designed to give the Team Captain and the medical clinic personnel a general overview of 1) procuring the necessary clinic supplies, 2) setting up the clinic in the village, and 3) miscellaneous information to help ensure your clinic runs smoothly. The head Team Physician and/or head Team Nurse should check with the Team Captain regarding fundraising and purchase of any supplies that will not be donated.

The medical clinic team is made up of a variety of personnel — doctors (North & Central American), nurses, translators, and support workers. Each facet of ministry within the medical clinic is important. A medical clinic team that works together will enhance its opportunity to reach the people of Central America with the message and compassion of Christ. Take time to familiarize yourself with this information, knowing that preparation is essential and will provide tremendous results on the field.

As you read through this material, make notes of any questions you may have for the Team Captain and/or the Team Activities Office of Baptist Medical & Dental Mission International.

BASIC MEDICAL CLINIC SETUP AND FLOW

The actual layout of your clinic will depend upon the facilities available in your assigned village. In general, you should be prepared to work in close quarters. Each medical professional (doctors and nurses) will setup up a personal work station with a small table and several chairs. Each station should be stocked with common items such as bandaids, tongue depressors, cotton balls, otoscope and disposal covers, stethoscope, a thermometer, a flashlight, and any miscellaneous items deemed necessary. Certain creams, e.g. anti-fungal/anti-bacterial, and parasite medication should also be available at each station for immediate use with patients. The remainder of all medicines will be dispensed through the Team Pharmacy per the instructions of the medical professionals.

Villagers will register at a central location in the village. At registration, each patient will receive a medical clinic registration card (see sample in this section and on this CD) filled in with their vital information. After attending a brief worship service to hear the Gospel, patients will have their cards marked and will line up to enter the medical clinic. (It is our hope that every villager would make a commitment for Christ that has not already done so; however, it is not a requirement for treatment. Every villager may receive the free services of your medical clinic regardless of his/her spiritual beliefs and/or decisions.)

A team member should be positioned near the entrance of the clinic to weigh each patient. A nurse may be positioned there as well to take blood pressure readings as needed and/or triaging the sicker patients to the physicians. (Some teams choose to have the individual physicians and nurses take blood pressure readings themselves as needed. Also, some teams set up one nurse's station to handle all wound cleansings, injections, etc.)

A team member or assigned village worker can assist with crowd control and flow in the medical clinic ensuring that patients are routed in an orderly manner to the next available medical station. Physicians and nurses will examine the patients and should complete each patient's registration card in full, including information about pregnancy, drug allergies, primary diagnosis, medications to be given to the patient, medical professional's initials, etc. (Those physicians and nurses who cannot speak Spanish will be provided a translator for his/her personal station.) Patients are then dispatched to the Team Pharmacy to receive their prescribed medications.

NOTE: Only licensed doctors and nurses can perform medical procedures, e.g. injections.

MISCELLANEOUS MEDICAL CLINIC SUPPLIES

Following is a list of miscellaneous supplies that you may need for your medical clinic. While this list may not be exhaustive, it will give you a basic understanding of the supplies your team will most likely need. The Team Captain and head Team Physician should coordinate the selection, purchase and packing of these supplies with other team supplies.

- 6 pints of Rubbing Alcohol
- 6 pints of Peroxide
- 6 small bottles (e.g. 8 oz.) of Betadine
- 2 bathroom scales
- 4 blood pressure cuffs (manual or electronic)
- 1000 tongue depressors
- 500 Band-Aids
- 500 cotton-tipped 6" applicators
- 100 gauze pads 2 x 2
- 100 gauze pads 4 x 4
- 10 rolls of gauze 2" x 10 yds
- 200 alcohol prep pads
- 12 adhesive tape rolls
- 3 elastic bandages 2"
- 3 elastic bandages 4"
- 1000 cotton balls
- 12 D5W or other IV solution (with tubing and IV start kits)
- Rehydration Salts or oral electrolytes
- 200 syringes 3cc with associated needles
- 1 Glucose Monitor
- 1 box urine glucose test strips
- 3-5 5.0 Silk Sutures
- Non-Water Soap or disinfectant – Anything to clean hands quickly and easily
- 1 Small Box Sterile Drapes
- 24 boxes Sterile Gloves
- 2 non-transparent shower curtains to create make-shift private exam area

SPECIAL NOTE REGARDING VITAMIN B-COMPLEX OR B-12 INJECTIONS

Physicians in Honduras and Nicaragua treat many conditions with vitamin B-complex injections. Therefore, they are accustomed to associating a consultation with an injection of some sort. If your team so desires, you may opt to bring enough Vitamin B-Complex or B-12 injections for each adult villager. **If you choose to do so, you will need to adjust the quantities ordered of certain medical supplies (e.g. syringes, alcohol prep pads, etc).**

Sample Medical Clinic Registration card

Your team must provide each patient with a registration card. The enclosed disk contains a copy of this card. The front of this card (patient information area) must be printed exactly as shown. The back side may be adjusted according to the medications your team purchases.

NOMBRE: _____ IDENTIDAD _____

DIRECCION: _____ EDAD _____ SEXO: F M

¿TIENE ALERGIA A ALGUNA MEDICINA? Sí o No Si es así, a cuál? _____

¿Ha recibido tratamiento médico para enfermedades del corazón? Sí o No ¿Diabetes? Sí o No

¿Tuberculosis? Sí o No ¿Embarazo? Sí o No ¿Riñones? Sí o No ¿Asma? Sí o No

¿Alta presión de la sangre? Sí o No ¿Otras enfermedades? _____

Para Mujeres: ¿Circula? Sí o No ¿Está embarazada? Sí o No ¿Está lactando? Sí o No

¿Planifica? Sí o No Si es así, ¿Cuál método de planificación usa? _____

¿Cuales son sus quejas principales? _____

PHYSICAL FINDINGS: PESO (Weight) _____ PRESION (blood pressure) _____

PRIMARY DIAGNOSIS: _____

SECONDARY DIAGNOSIS: _____

DISPOSITION: _____ REFERRED? Y N WHERE? _____

Malnutrition Grade: Mild Mod. Severe URI: Mild Mod. Severe Diarrhea: Mild Mod. Severe

INITIALS OF ATTENDING PHYSICIAN OR NURSE: _____

COMMENTS: _____

(BACK SIDE OF CARD)

_____ Albendazole
 _____ Multi-vitamins
 _____ Acetaminophen
 _____ Antihistamine
 _____ Antacid tabs
 _____ Folic Acid
 _____ Antacid

PARASITES
 _____ Albendazole
 _____ Piperazine

ANALGESICS
 _____ Acetaminophen
 _____ Ibuprofen

ADDITIONAL VITAMINS
 _____ Prenatal vitamins
 _____ Ferrous sulfate

ANTI-HISTAMINES
 _____ Chlorpheniramine
 _____ Benadryl for allergy
 _____ Benadryl for SLEEP
 _____ Histamine liquid
 _____ Meclizine

INJECTIONS _____

RESPIRATORY
 _____ Albuterol tabs
 _____ Albuterol liq
 _____ cough syr

HEART & BP
 _____ HCTZ 25 mg
 _____ Propanolol tabs
 _____ Atenolol tabs
 _____ Digoxin
 _____ Nitroglycerine

EPILEPTIC
 _____ Carbamazepine
 _____ Dilantin
 _____ Phenobarbital

ANTIBIOTICS
 _____ Cipro (Adults)
 _____ Amoxicillin
 _____ Amoxicillin susp.
 _____ Cephalexin
 _____ Cephalexin susp.
 _____ Doxycycline (Adults)
 _____ Metronidazole
 _____ Erythromycin
 _____ Penn VK

GASTRO-INTESTINAL
 _____ Tagamet/Zantac
 _____ Imodium tabs
 _____ Imodium liquid
 _____ Kaopectate
 _____ Dulcolax
 _____ Dramamine

PESTULIDES
 _____ Permethin shampoo
 _____ Permethin lotion

MISCELLANOUS TABS
 _____ Glyburide
 _____ Synthroid
 _____ Flexeril

TOPICALS/VAGINAL
 _____ Antifungal cream
 _____ Steroid cream
 _____ Antibiotic oint
 _____ Antibiotic eye drops
 _____ Visine eye drops
 _____ Antibiotic ear drops
 _____ Benzocaine ear drops
 _____ Vaginal cream
 _____ Fluconazole tab

NOTES REGARDING REGISTRATION CARDS

Use the template provided on this disk, please print the above registration cards on card stock (something similar to 67 pound Bristol) with the patient information on the front and the prescription medication information on the back. Cards should be approximately 5.5" x 8.5" in size. Have the head Team Physician, Team Pharmacist, and Team Captain work together to adjust the medicines listed on the back of the medical clinic registration cards so that it matches the medications that are being shipped.

Teams to **Honduras** should print approximately 3,200 medical registration cards. Teams to **Nicaragua** should print 4,500 medical registration cards.

On the back side of the medical registration cards the most commonly prescribed medicines given to most patients are grouped together and listed first.

We suggest you consider using different colors of card stock to differentiate between the days the cards are distributed. For example, the cards you give away on the first day of registration may be light blue. The cards you give away on the second day of registration may be yellow, etc. Some teams find this helpful to gauge patients that receive the card one day but for one reason or another are not able to go to the medical clinic that day. Also, be sure that your card colors are distinct from the cards that will be used for the Dental Clinic.

The Team Captain, BMDMI Missionary in charge, and the local villagers in charge of registration should work closely together in deciding how to distribute the registration cards each day.

DISEASES/ILLNESSES ENDEMIC TO HONDURAS AND NICARAGUA

AIDS – A growing problem as in all parts of the world.

Leprosy – Not widespread but does occur in a few regions

Rabies – Occasional cases but not rampant

Typhoid – Relatively common

Brucella – Common in animals

Tuberculosis – very common and frequently underreported. They use a four drug, six month regimen (Rifampin, INH, Steptomycin, PZA). Work up family contacts, and the Ministry of Health would very much appreciate referrals and sputum specimens on cases we suspect.

Dengue – very common

MISCELLANEOUS NOTES FOR MEDICAL CLINIC PERSONNEL

- *Medicines Listed on Registration Card:* Have the head Team Physician, Team Pharmacist, and Team Captain work together to adjust the medicines listed on the back of the medical clinic registration cards so that it matches the medications that are being shipped.
- *Personal Exam Supplies:* Have each medical clinic team member bring his/her own otoscope (with covers), stethoscope, flashlight, scissors, and extra batteries, if possible.
- *Use of Scrubs:* Please note that only team nurses, physicians, dentists, and dental assistants are allowed to wear scrubs on the trip during clinic hours. Scrubs should not be worn to the evening worship service by ladies. And lastly, scrubs must not be distributed to any villager unless you are certain that they are health professionals. This deters villagers from wearing them later on and passing themselves off as healthcare professionals.

- *Hygiene Class Resources:* If you have a team member interested in giving brief hygiene talks, please contact the BMDMI Team Activities Department for a copy of available materials.
- *Helpful Resource:* The book entitled Where There Is No Doctor by Dr. David Werner can be a helpful tool. It is also available in Spanish: Donde No Hay Doctor. This book may be obtained from the following address or from your local bookstore:

The Hesperian Foundation
 1919 Addison Street
 Berkeley, CA 94704
 Phone: (510) 845-1447
 Fax: (510) 845-9141
www.hesperian.org
 Email: hesperian@hesperian.org

HELPFUL HINTS FROM DR. HENRY CARTER (Veteran Team Physician)

After a number of mission trips to Central America with Baptist Medical & Dental Mission International, several observations have been made which may prove helpful to future medical team members, especially those who do not normally practice clinical medicine, who are preparing for their first experience.

First, from the perspective of current medical practice in the United States, one may be inclined to feel, at first, that the medical practice your team provides is too superficial to be useful. But by keeping in mind several principles, it can be concluded that it IS worthwhile:

- A. The primary purpose of these efforts is to help bring people into the permanent proper relationship with God. Indeed, this is the most important lasting good which can result.
- B. To that end, perhaps the most important thing one does is to express love and concern in his/her smile and demeanor with the patients.
- C. At the same time, all of us are concerned with the first principle of medical practice: “First, do no harm.”
- D. Perhaps the most meaningful part of a patient-medical professional encounter is the touch. The willingness to listen to and physically examine the patients, albeit very briefly, has value.
- E. Although most of us have been dependent on laboratory and imaging data, we all know that the history and physical still yields more important information than anything else. And although there is a language barrier to the history and time and place constraints to a thorough physical exam, proper use of our overall medical knowledge, of the interpreter, and of our otoscope, stethoscope, and sensitive fingers and eyes can result in a reasonably complete assessment.

Second, we have to remember that the patients we see are not accustomed to the standards of care our patients at home are used to. They DO appreciate a sincere effort to help them, and they rarely see any other medical professional than a team member.

Third, they tend to enumerate all of the symptoms they can recall in listing their problems.

Fourth, the person registering them does not have a medical background and will list complaints as best they understand them. It is *important* to remember that most of the patients are not having all of these problems acutely at the moment, and the terminology used may be grossly inaccurate diagnostically; one should not accept a complaint as diagnosis.

Among the most frequent complaints listed are:

Diarrhea	Poor Appetite	Open or Crusted Sores
Cough – “Asthma”	Fungus	Vaginal discharge
Flu/Cold	Infection	Abdominal Discomfort
Fever	Skin Spots	Headache
Arthritis	Parasites	Weakness

Diarrhea is no doubt a common and chronic problem, partly due to parasites, as well as bacterial, viral and dietary causes. Judging from their appearance, it is not usually acute or life-threatening, although it certainly can become so, especially in infants and children. It should probably not evoke an automatic prescription of Lomotil, and this medicine should probably never be given to infants or children under 2 years of age. Treatment of Kaopectate for PRN use and treating parasitic infections are probably more appropriate. Emphasis should be placed on rehydration with salt-sugar-lemon juice-water solution.

Cough – “Asthma” (“Tos”, “Asma”) are frequently listed, and one seldom hears rales or wheezes or coughing during the exam. The expectorant mixture used is helpful. Antibiotics are seldom needed. Much of this problem is the result of smoke inhalation from the cooking fires in their tiny homes. If there is evidence or a reliable history of true asthma, Albuterol tablets and liquid are available, and these patients may be already taking it. “Bronchitis” is often listed also. If one suspects a true bacterial infection, certainly an appropriate antibiotic would be prescribed as well as the expectorant.

Flu/Cold (“Gripe”) refers to the flu-like constellation of symptoms, and the patients are not often actually acutely ill with this. An analgesic and cough medicine usually suffice. “Calentura” (fever) is often listed, again, without evidence of acute illness. Fever is never an illness in itself and only requires treatment if it is very high. Temperatures are not usually taken in the clinic or in their homes, so this is simply an estimate. It does not call for an automatic order for antibiotic, but Acetaminophen or Aspirin can be used when needed.

Infection (“Infeccion”) is frequently listed without any explanation or localization. An effort to obtain additional history and evaluate with physical examination is worthwhile but often unyielding. Unless specific evidence of bacterial infection is found, antibiotic usage is inappropriate.

Poor Appetite (“Falta de apetito”, “desgaño”, “desnutricion”) is used to describe their nutritional state. “Anemia” is also frequently used. Most no doubt do have some nutritional inadequacy, although the large majority appear quite well nourished. Treatment with anti-parasitic medications and vitamins is expected to improve these problems, and probably is the most helpful thing we can do medically for most of them. There are always children with obvious severe nutritional deficiency, and it is hoped that they will improve with extra vitamins as well as parasitic treatment.

Parasites (“Parasitos”, “animales”, “lombrices”) appears on most cards, especially in the more remote areas. No doubt there are multi-parasitic infections, but the one which is treated is ascariasis, or infection with large roundworms. These may cause not only “dolor del estomago”, nutritional problems and diarrhea, but in their life cycle pass through the respiratory tract and may be coughed up or found migrating through the nose and mouth. Respiratory problems may result from heavy infections, and respiratory deaths in infants and small children can occur. The Albendazole that is currently being used for patients above the age of 2 is effective and is usually given 1 tablet taken on the spot. The taste is not good and it helps to have small candies or crackers to give after the pills, especially for the children.

Piperazine liquid is used for children age 2 and under. Dosage is calculated in the pharmacy by weight, and it is **necessary** for the weight to be on the card; if it has been missed, send the children back to the weight station before going to the pharmacy. It is unlikely that the patients are ever “cured” of their infections, since they are constantly re-exposed by their lifestyles and sanitation practices, but by lightening their burden for a while, they are given an opportunity to improve physically.

Skin Spots and skin problems are frequent and are no doubt uncomfortable at times. The skin is constantly exposed to their environment, which usually includes limited opportunities for cleaning. Many Central Americans are quite conscious of variations in pigmentation and list “pano blanco” or “panos negros” (white spots or dark spots) as problems. While there may be some underlying metabolic reason for these, they are not correctable with any medication we have. You may point out freckles on his or her own skin and explain through the interpreter that skin pigmentation varies in most people and actually may enhance your appearance. “Granos” are usually open or crusted sores and can be treated with antibiotic ointments and, if need, systemic antibiotics; emphasizing cleanliness and providing soap will also be useful. “Hongos” (fungus) is a frequent complaint, especially on the feet. Taking time to have them remove their shoes and socks, clean the feet with a Wet One (be sure paper towels are available to dry their feet) and close inspection of the intertriginous areas will reveal actual evidence of tinea pedis in only a small percentage. Only these and the ones with evidence of ring worm should be treated with antifungal ointment, the supply of which is always exhausted before the Mission is completed. Some will have contact dermatitis and may respond to Hydrocortisone cream. Scabies and head lice (“piojos”) are present although not listed as often as one would expect. Kwell is apparently a familiar medication and can be prescribed safely. Unfortunately, ectoparasites are not likely to be cured any more than the internal parasites as long as living conditions remain unchanged.

Vaginal Discharge is referred to by “flujo blanco”. Since vaginitis may be due to several causes, specific identification would require a vaginal exam, wet prep microscopic examination, and possibly gram stain or even culture. None of these can be done, so treatment is empirical. It is appropriate to explain through the interpreter that there are several causes, that we are giving her the only vaginal medication that we have, and that it is possible that it may not cure the problem.

Abdominal Discomfort may be listed as “vientre” or “dolor de vientre” referring to low abdominal or pelvic discomfort. This may be due to PMS, PID, endometriosis, and probably other causes. Without good reason, it would not justify an antibiotic, but the anti-inflammatory analgesic medication may provide some relief.

Arthritis (“riñones”, “espalda”, “dolor de cuerpo”, “dolor de huesos”) describes the musculoskeletal discomforts in the joints and muscles. Considering the lifestyle, work habits and sleeping conditions, one should not be surprised that these things are common, and even though the relief of the Aspirin, Tylenol, and Ibuprofen is temporary, it surely must be welcomed.

Headache (“dolor de cabeza”, “dolor de cerebro”) refers to frontal and occipital headaches and are frequent complaints. Again, the analgesic offers as much help as we can give. This list is far from complete, but it does cover the more commonly encountered problems recalled fresh after a trip to the Mission field. Hopefully all of us will try to evaluate problems that are simply expressed as complaints. Trying to evaluate a hundred patients per day in the midst of 500 other chattering people, crying babies, music and preaching from the nearby evangelistic services, with no good communication and a sore back and seat is a real challenge. Maintaining one’s composure and professional approach demands a lot of self-discipline along with God’s strength and grace. Having a young mother or senior citizen smile and say “gracias” is worth the effort it takes, and remembering that our primary purpose is to assist in restoring a person’s relationship with God gives lasting meaning to these efforts.

EMERGENCY KIT

Each team is required to carry an emergency kit with them at all times. This kit is to be used for acutely ill Team Members or patients. It is suggested that the contents be packed in a small suitcase or a tackle box that can be carried on the plane. One person, preferably the team physician, should be responsible for the kit and every team member should be made aware of whom the designated person/physician is. You may wish to carry these items “on loan” from your team pharmacist’s drugstore or local hospital and return any unused medication or supplies, paying only for the medication or supplies used. **NOTE: Due to changes since 9/11, you will need a “prescription” for all medicines and syringes in the kit and you will need to NOT include any scalpels or sharp-tipped scissors.** Syringes may be included in the kit as long as there are prescribed injectable drugs in the kit as well. Please see below list (recommended by one of our team physicians) of items to include in your team emergency kit. Feel free to adjust the list for your team needs.

1. Ambu Bag and Mask
2. Epinephrine 1:1000
3. Lidocaine
4. 1000CC Lactated Ringers
5. 500CC D5 .25 NaCl
6. IV Tubing Dial-a-flow
7. Intracath #18, #20, #22
8. Alcohol Swabs
9. Band-Aids, Regular and Butterfly
10. Tourniquets (or IV start sets are useful)
11. Stethoscope & Blood Pressure Cuff
12. Solu Cortef I.V.
13. Albuterol Inhaler
14. Valium I.V. (optional)
15. I.V. Antibiotics such as Penicillin, Cephalosporins & Vibramycin
16. Inderal (optional)
17. Nitroglycerin Sublingual Tablets or Spray
18. Lasix I.V. and P.O. (optional)
19. Syringes and Needles
20. Injectable Phenergan
21. Benadryl I.V., I.M., and P.O.
22. Eye Stream (Normal Saline Solution for Eye Irrigation)
23. Foley Catheters (optional)
24. Plastic Bandage Fast-Fitting (you can get vet wrap (same as this) at the feed store for much less than you pay for it otherwise)
25. I.V. Pitocin
26. Suture kit with suture (4-0 Nylon)
27. Aminophylline (used this once for a child with asthma- lifesaver)
28. Pain med (for team members that may become ill)
29. Vistaril (to give in combination with Phenergan)
30. Dramamine
31. Clonidine tablets
32. Instruments such as hemostats, scissors
33. Bandage scissors
34. Betadine & antibiotic ointment
35. P.O. antibiotics (amoxil, emycin, cipro, levaquin)
36. P.O. beta blocker
37. P.O. steroid and steroid cream
38. Augmentin- (drug of choice for dog bite)
39. Insulin pen
40. Ice packs (kind you can activate)
41. Ace wraps
42. 4x4s (a few)

***I know a lot of this is available in the pharmacy; but I try to be prepared for times when we don't have access to the meds in the pharmacy.

