International MedicalRelief

Well Care Protocols

SYNDROMIC MANAGEMENT

INTRODUCTION

This briefing packet will help you organize as you prepare for your journey, as well as provide you with important clinic and procedure protocols, pharmacy formularies, scope of practice protocols, a flow of clinic map and the essential roles of each volunteer on an IMR team.

A health care practitioner in the mobile setting, facing a long line of patients who have waited for hours in the hot sun to be seen and who have rarely before seen a doctor, must:

- Have a good grasp of the likely etiologies of various syndromes in the area being served
- Know something of the pathophysiology of common diseases as they occur in IMR Clinics
- Be able to make a clinical assessment of the symptoms and signs with which the patient presents
- Hypothesize a diagnosis, without hope of laboratory confirmation
- Know what is on hand in the pharmacy and what other local resources are available to use
- Have some information on what works in the culture in which the patients live
- And finally put together a reasonable plan of management

Syndromic Management is what we call this clinical approach. In essence, it differs from what we do in the US only in that it is so modified by the limitations noted above.

Disclaimer

 This document does not supersede best practice medical judgment. IMR is not held accountable for those practitioners who do not follow suggested personal protection guidelines.

Scope of Practice

It is IMRs expectation that providers are aware of the scope of practice of their state and national licensure.
IMR takes very seriously the role of patient advocate during our medical mission trips. No one may work outside of his or her lawful scope of practice. This includes procedures, medication prescription, and diagnosis.
IMR supports learning and education during our medical mission trips. It is the sole decision of a provider, (MD, DDS, RN, EMT, Paramedic etc.) to offer education and teaching with the understanding it is done under their license, and they accept full responsibility for the intern under their tutelage.
It is the privilege and an IMR CMO Protocol for the CMO to empower RNs under the CMO license to prescribe over the counter medications such as ibuprofen, acetaminophen, antacids, allergy medications and various creams as well as work at our worming station distributing worming medications to appropriate patients. This will be done on a case-by-case basis and reviewed and approved by the CMO.
Any providers found to be operating outside of their scope of practice will be placed on probation for a length of time determined by the Team Leader and CMO and may be reported to their state/national licensure board if deemed necessary by the CMO, Team Leader and IMR headquarters.

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Provider Checklist

- [ ] Diagnostic tools:

Mandatory

- [ ] Stethoscope
- [ ] Blood pressure cuff
- [ ] Thermometer
- [ ] Penlight

Optional

- [ ] Otoscope
- [ ] Glucometer and strips
- [ ] Ophthalmoscope
- [ ] Patella hammer
- [ ] Calculator

- [ ] Required travel immunizations (See CDC website - www.cdc.gov)
- [ ] Photocopies of passport and medical license (2 to 3 copies recommended)
- [ ] Travel insurance
- [ ] Medical malpractice insurance
- [ ] Quick reference pharmaceutical guide - book or phone app
- [ ] Gloves - Minimum 1 box in your size
- [ ] Hand sanitizer
- [ ] Pen

What you may see in clinic

Fungal infections	Malaria	Urinary tract infections	Dental cases
Scabies	Dengue fever	Vaginal infections	Malnutrition
Impetigo	Typhoid	STIs	Common cold
Parasitic infections	HIV/AIDS	GERD	Influenza
Otitis media	TB	Gastritis	Upper respiratory infections - URIs
Well check visits	Dehydration	Chronic pain	Hypertension
Allergies	Various cancers	Chronic fatigue	Diabetes

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Procedure Protocols

IMR's mantra is DO NO HARM.
In order to support our volunteers during clinic and ensure the safety of our patients the following steps are mandatory prior to any and all procedures or interventions during clinic.

- Communicate the situation and suggested intervention during a conference with the Chief Medical Officer (CMO) and Team Leader prior to any and all major interventions or procedures to determine the following:
- The long term results and future care needs for the patient post procedure in their home setting.
- IMRs clinical capacities to appropriately manage the procedure within DO NO HARM guidelines.
- Consult with pharmacy regarding appropriate medications and the availability of these medications for the procedure.
- Educate and discuss the procedure with the patient and family members.
- Gain consent of the patient and/or a family member if patient is a minor, use a translator and thumb print consent if necessary.
- Have a second trained medical provider with you during the procedure for support and assistance.
- Non medical personnel may only observe the procedure with permission of CMO and Team Leader.
- STOP immediately and get assistance from the CMO if you become overwhelmed or patient is showing signs and symptoms of intolerance to the procedure.
- Follow up with the family and patient to discuss after care or referral to a local clinic if necessary.
- Follow up and debrief with the CMO and Team Leader post procedure and patient care.

Referrals

IMR team members will sometimes encounter a patient who requires a higher level of care than IMR can offer at their field clinic; this may be either an emergent or a chronic condition.

The following protocol must be followed to ensure the patients' needs are best met and the intervention is within the capacity of the local community and IMRs medical clinic.

1. Inform CMO and Team Leader of patient history, current condition and justification for transfer to a primary health care center.
2. Determine closest medical center to IMR field clinic.
3. Determine mode of transportation of patient to clinic and their return trip home.
4. Determine cost/benefit for patient.
5. If transfer is approved provider must fill out 2 copies IMR transfer paperwork prior to departure, one copy to remain with the patient and one for IMRs clinic file.
6. Providers are not authorized to write any orders for the local hospital or health clinic to fulfill on a patient transferred out of an IMR clinic. Doing so will result in the provider being financially responsible for any charges incurred by the patient.
7. Provider accompanies patient to local medical center, gives report to clinic health care workers and returns to IMR clinic immediately. If the provider is not able to accompany the patient they must appoint and designate an IMR representative to accompany the patient during transfer.
   a. Take translator and security if deemed necessary by CMO and Team Leader
   b. May take additional assistance if deemed necessary and approved by Team Leader.

8. It is IMRs sole discretion and decision what, if any, monetary assistance is provided for the patient after transfer.

Dehydration

EDUCATION	TREATMENT PROTOCOLs		
Diarrhea, malnutrition, and hypovolemia are the major killers of children in the developing world	**Adults**	**Infants and Children:**	**Children:**
Mild dehydration is common; Severe dehydration is not. TEACH: signs and symptoms of severe dehydration TEACH: Diarrhea and vomiting may cause dehydration. Children should be started on ORT immediately. CONTINUE breast feeding and feeding solids, especially bananas	Administer small sips of oral rehydration solution (ORS) every 5 minutes for up to 24 hours or until patient begins to urinate normally and signs and symptoms of dehydration resolve.	For Infants: Using breast milk (if available), and administer orally with a 3ml to 5ml syringe, teaspoon or medicine dropper.	Administer small sips of ORS, using the formula above - every 5 minutes or as tolerated for up to 24 hours or until child begins to urinate normally and signs and symptoms of dehydration resolve. When child is able, introduce thin cereals, soups, and solid food. Continue to reassess.
TEACH: • SODIS/Boiling for clean water • BRAT diet (Bananas [potassium]; Rice; Applesauce; Toast) • Watery cereals/porridge (e.g. 8 heaping teaspoons finely ground maize, rice or potatoes with warm water and a bit of salt) is great if the child accepts it. The carbohydrate helps the absorption and the calories provided are important. • Adding 5-10 ml oil to cereal helps bowel healing and adds energy.	When patient is able, introduce thin cereals, teas, soups, and solid food. Continue to re-assess.	Administer at a slow rate – current CDC recommendations are to administer 50-100ml of ORT solution per kg of body weight during the first 2 to 4 hours.[1] Continue to re-assess	If the child indicates they want more ORT/ORS, more can be administered as health care provider warrants. Caution should be used as larger amounts of ORS administered too quickly can cause vomiting, exasperating dehydration.

WEIGHT (KG)	<5 KG	5-8	8-11	11-16	16-30	30
ORS (ML/4HRS)	200-400 ML	400-600	600-800	800-1200	1200-2200	2200-4000

Homemade-Field Oral Rehydration Drink/Solution

Using Sugar and Salt	Using Powdered Cereal and Salt
Before adding sugar be sure to taste solution to ensure it is less salty than tears In 1 (one) liter of clean water, add ½ a level teaspoon of salt and 8 (eight) level teaspoons of sugar. If available, you may add half a cup of fruit juice, coconut water, or mashed ripe banana.	**May use powdered rice, finely ground maize, wheat flour, sorghum and cooked and mashed potatoes.** In 1 (one) liter of clean water and a ½ level teaspoon of salt and 8 (eight) heaping teaspoons of powdered cereal. Boil for 5 to 7 minutes to form a watery solution. Cool mixture before administering. Be aware of spoilage of mixture in extremely hot climates.

The Common Cold

- Self-limited viral illness of the nose and pharynx
- Smoke is often the cause of colds
- **Do not treat the common cold with antibiotics**

MANAGEMENT

EDUCATION	DECONGESTANTS	ANALGESICS
Talking about the exposure to smoke is worthwhile. This type of community health education is an important part of helping patients to be healthier. Recommend a mask (and provide a few from clinic) for use while cooking or burning.	Decongestants: ADULT ONLY: Phenylephrine 10 mg qd, prnx15tabs >12y: 1 tab q4h, max 6/24h OR Sudafed 30mg – 120mg bid, prnx15 tabs >12y: 2 tabs q 4-6h, max 8/24h >6<12y: 1 tab q 4-6h, max 4/24h	Ibuprofen, 200 mg prn x 5 days, MAX bid OR Acetaminophen, 325 - 500 mg prn x 5 days , MAX bid

NOSEBLEED (EPISTAXIS)

Nosebleeds are common. While it is true that any bleeding from the nose (epistaxis) is abnormal and that the sight of all that blood can be upsetting, most are easy to control. That being said, some tips to manage them may be helpful.

MANAGEMENT

EDUCATION	HANDLING AN ACTIVE NOSEBLEED
Avoid trauma (don't pick the nose!)	Have patient sit quietly and blow nose gently (through both nostril simultaneously, not separately) to remove debris, then examine for foreign body or parasite
Avoid smoke from cooking fires and burning fields	Pinch the distal end of the nose firmly but not too hard for *10 minutes* (by the clock, not by guesswork), then stop and observe
Nasal saline lavages can help dryness	If still bleeding, pinch it again or pack the bleeding nostril with a wad of cotton smeared with Vaseline or an antibiotic ointment and reapply pressure
Eating oranges, tomatoes, and other fruits may help strengthen blood vessels	Spitting out the blood in the throat is fine, but the patient should not try to snort down stuff from the pharynx
An alternative method is to place a wad of cotton (with Vaseline or antibiotic ointment) in the nostril, have the patient bend forward at the waist while sitting up (to avoid swallowing blood), and place a cold compress applied to the bridge of the nose	

SICCA (DRY EYE) SYNDROME

- Eyes are chronically dry if there is insufficient tear production and tear lake.

MANAGEMENT

Education	Medication	Home Remedy
Avoid trauma to eye (including rubbing).	Artificial tears, prn,	Boil glass jar with lid for 5 minutes. Allow to cool; remove from water. Do not touch inside of jar.
Eye protection from the elements and irritants (especially smoke).	Vitamin A	Boil water and pour a small amount into jar. Add a pinch of salt. Taste it: no saltier than a baby's tears
Exposure to smoke from cooking fires and burning fields should be limited	**Additional Treatment**	Cover tightly and allow to cool After water is cool, use a small dropper or spoon (boiled first!) to drop water into eyes when they feel

as possible		dry.
Sunglasses, if available	Patch eyes at night	Discard water each night and repeat process each day

ACUTE DIARRHEA, Mild

Diarrhea is much more common in the developing world than in the US. It may or may not be a serious illness, but think of it as potentially dangerous in small and undernourished children.

- If antibiotics are required: Send to the next level of care

MANAGEMENT

Education	Mild	Medication	Rehydration Home Brew
Wash hands frequently	Rehydration therapy – see Home Brew Recipe	Do not use slowing agents	1 liter boiled water in a boiled container with a lid
Only drink clean water		Treat nausea symptomatically	6 teaspoons sugar, ¼ teaspoon salt
SODIS/boiling		BRAT diet: Bananas, Rice, Applesauce, Toast as available	Sip small spoonsful all day, continue eating, continue breastfeeding

GASTRITIS

Irritation of the stomach mucosa; usually transitory, e.g. from a virus or too much alcohol.
Chronic gastritis is a case that won't go away.
H. Pylori: *Send any suspected cases to the next level of care*

MANAGEMENT

EDUCATION	Medication		
Minimize cups of coffee, tobacco, spices, night time snacks	Mild	Moderate	Severe
Avoid alcohol	Calcium Carbonate 1 tab prn after meals, max tid, #15 OR Ranitidine 75 mg - 150 mg qd x 5 tabs OR Famotidine 20 mg – 40 mg bid x 10 tabs	Ranitidine 75 or 150 mg qd x 20 tabs OR Famotidine 10 or 20 mg qd x 15 tabs	*Send to the next level of care*
Minimize use of aspirin or other NSAIDs			
Antacids may be useful			

GASTREOESOPHAGIAL REFLUX DISEASE (GERD)

GERD is a syndrome caused by reflux of acidic stomach contents into the esophagus. It is the cause of heartburn and the awareness of regurgitation. It may be only occasional and therefore inconsequential, but it also may result in damage by the acid to the esophageal lining: esophagitis, which may lead to cancer.

MANAGEMENT

<table>
<tr><th rowspan="2">EDUCATION</th><th rowspan="2">INFANTS</th><th colspan="3">Medication</th></tr>
<tr><th>Mild</th><th>Moderate</th><th>Severe</th></tr>
<tr><td>Do not eat for 2-3 hours before lying down</td><td>Thicken formula with rice cereal (1 tsp/2-4 oz and enlarge nipple hole)</td><td rowspan="2">Calcium Carbonate (TUMS), prn after meals, x 15 tabs</td><td rowspan="2">Ranitidine 75 or 150 mg qd x 15 tablets
OR
Famotidine 10 or 20 mg qd x 10 tablets</td><td rowspan="2">Send to the next level of care</td></tr>
<tr><td>Raise head of the bed 6 inches (do not rely on pillows)</td><td>Give 1-2 teaspoons of rice cereal after breast feeding</td></tr>
<tr><td>Minimize coffee: avoid alcohol, tobacco, spices</td><td colspan="3">Do not overfeed infants. After gently burping infant, place in semiupright position; avoid “bouncing” the infant after meals</td><td></td></tr>
</table>

WORMS (OR HELMINTHS) OF THE INTESTINE

- Many children seen in the clinic have one or more worms, especially ascaris, the hookworms, and trichuris.
- Worms less frequently infect adults but the entire family should be treated as a general recommendation.

MANAGEMENT

<table>
<tr><th>EDUCATION</th><th colspan="2">Medication</th></tr>
<tr><td>Use outhouse/latrines</td><td>Albendazole</td><td>Mebendazole</td></tr>
<tr><td>Wash hands after going to the toilet, before preparing or eating meals</td><td>400 mg x 1 dose, Repeat in 1 week if heavy infestation</td><td>100 mg bid x 3 days</td></tr>
<tr><td>Don’t let kids play in dirt or eat dirt or stool</td><td rowspan="2">CHILDREN < 12 mo:
200 mg x 1 dose; may be crushed and put in water</td><td rowspan="2">PINWORMS: 100 mg tab x 1, repeat in 2 weeks
Same dose in children</td></tr>
<tr><td>Keep fingernails clipped short so eggs won’t lodge under them</td></tr>
<tr><td>Cook meet (especially pork) thoroughly</td><td colspan="2">Stronglyloides: 400mg bid x 3 days</td></tr>
<tr><td>Protect food from flies</td><td colspan="2">Tapeworms</td></tr>
<tr><td>Do not eat food that has fallen to the ground unless it is washed first</td><td colspan="2">Albendazole: 400mg qd; may repeat in 1 week</td></tr>
</table>

Water sources must be clean and protected from contamination	

ACUTE HEADACHE and TENSION /SIMPLE HEADACHE

If someone present with a headache and there is no similar past history of headache, or if this new headache pattern is much different than previous ones, you should consider that it may be more serious.
Migraine, Meningitis, suspected, Stroke, suspected: *Sent to the next level of care*
Always if more than simple headache suspected: Recheck blood pressure, including postural

MANAGEMENT

EDUCATION	MEDICATION	
	Benign, Mild Headache, ADULT	**Benign, Mild Headache, CHILD**
Avoid caffeine and other local stimulants	Acetaminophen 325 mg prn x 10 tablets, MAX bid OR Ibuprofen 200 to 400 mg prn x 10 tablets, MAX bid	Acetaminophen 10-15mg/kg, x 10 tablets, MAX bid OR Ibuprofen 5-10 mg/kg prn, MAX bid
Cool compresses		
Caffeine may help in acute headache		
Suspect Dehydration! Increase daily water consumption with clean water		N.B.: Avoid aspirin if patient younger than 18 years old (risk of Reyes Syndrome)
Teach Rehydration Home Brew and SODIS/boiling		

OSTEOARTHRITIS

Arthritis is a joint inflammation. Osteoarthritis (OA) is a degradation of the surfaces of a joint that develops slowly, mainly because of repetitive micro-trauma to the joint. Osteoarthritis is the same as "wear and tear" or degenerative joint disease but is the preferred term.

- **Differential of Bursitis, Gout, Pseudogout, RA, Septic Joint:** *Send to the next level of care*

MANAGEMENT

EDUCATION		MEDICATION		
Rest	ACUTE JOINT	MILD	MODERATE	SEVERE
Avoid physical stress on joints	Rest when painful	Ibuprofen 200 mg prn x 10 tablets, MAX bid OR Naprosyn 250 mg prn x 10 tabs, MAX BID OR Acetaminophen 325 mg, x 20 tablets, MAX tid	Ibuprofen 200 mg prn x 15 tablets, MAX bid OR Naprosyn 550 mg prn x 15 tablets, MAX bid OR Acetaminophen	Ibuprofen 600 or 800 mg prn x 15 doses, MAX bid OR Naprosyn 550 mg prn x 20 tabs, MAX bid OR
Maintain range of motion with gentle flexion and contraction.	TEACH: Hot soaks (dip clean towel in hot water, squeeze out excess, place on painful joint, cover with plastic and another towel,			
TEACH: Stretching and strength building exercises				

TEACH: Stiffness on awakening is normal	refresh as needed)		500 mg, x 15 tablets, MAX tid	Acetaminophen 1 gm, x 15 doses, MAX tid

LOW BACK PAIN

Mild to severe low back pain, often referred too as "pain in the kidneys" is one of the most common complaints in clinic. Back pain has multiple causes. The more common disorders are described here: **Muscle or ligament strain, arthritis, pregnancy (especially in 3rd trimester), osteoporosis.**

MANAGEMENT

EDUCATION	MEDICATION	
Sciatica may take longer to heal	MILD/MODERATE	SEVERE
TEACH: Stretching and strengthening exercises	PREFERRED: Acetaminophen 325 mg prn x 20 tablets, MAX bid	PREFERRED: Acetaminophen 500 mg, prn x 20 tablets, MAX bid
Heat every 30 minutes		
Gentle massage	ALTERNATIVE:	ALTERNATIVE:
TEACH: Don't do anything that hurts, if possible Squatting Lift and keep heavy objects close to the body	Ibuprofen 200 mg prn x 10 tablets, MAX bid OR Naprosyn 250 mg prn x 10 tabs, MAX BID	Ibuprofen 600 or 800 mg prn x 15 doses, MAX bid OR Naprosyn 550 mg prn x 20 tabs, MAX bid

RASHES

Any rash you are not familiar with or are unsure of the cause: *Send to the next level of care*
Boil, tropical ulcer; Burns: *Send to the next level of care*

- Ask the patient how they would treat the lesion…you may learn something important

Tinea Versicolor; Tinea Pedis; Tinea Corporis	Tinea Capitis *If associated with open lesions (Kerion), send to next level of care*
Any azole cream or solution; apply thin layer 2-3 times per day	Any azole solution
	Gentian Violet, painted on individual spots

GENERAL MANAGEMENT

A. Preparation and Use of Moist Compresses

- It is critical to use clean water, so have the patient boil water.

- For hot compresses, it should cool to the point where it is still uncomfortable to put a finger in it before use.
- Apply the hot cloth to the affected area, cover with a thin plastic sheet, and then cover that with an insulating towel.
- When the cloth cools, refresh it in the hot water and repeat the process.

Insect Bites

- IMPORTANT: Ask the patient to describe the insect or spider and identify local treatment for use
- Body lice, fleas, mites, bedbugs, mosquitos, ticks, chigoe fleas, chiggers, and other biting insects

MANAGEMENT

<table>
<tr><th>General Education</th><th>Scabies</th><th>Head Lice</th><th>Fleas</th><th>Mosquitos</th><th>Myasis</th></tr>
<tr><td>Good basic hygiene and frequent washing will reduce mites, lice, and fleas</td><td>Avoid intimate contact with others with scabies</td><td>Easily spread through shared hats, combs, etc.</td><td>Jump between humans and animals</td><td>Carry Malaria, Dengue, Japanese Encephalitis</td><td>Botfly larvae laid under the skin</td></tr>
<tr><td>Over-crowding, especially while sleeping, is detrimental</td><td>Keep fingernails short</td><td>Secondary infection from scratching</td><td rowspan="3">TREATMENT: Symptomatic. Hydrocortisone cream Bacterial cream may be required if a secondary infection develops</td><td>Don’t allow standing water</td><td>Look for breathing hole in center of papula</td></tr>
<tr><td>Spraying with insecticide is not ideal but will provide control. This is often a better option than infestation.</td><td>Put clothing and bedding in hot sun; wash frequently</td><td>TREATMENT: Shave head and cover with petroleum jelly to smother the lice.</td><td>Cover at dawn and dusk</td><td rowspan="2">TREATMENT: put Vaseline in a bottle cap and tape it over the furuncle. Will take a little time to work. The botfly will look to escape.</td></tr>
<tr><td>Aedes mosquitoes (carriers of dengue) can be discouraged by minimizing the availability of standing water in such things as trashed plastic containers and discarded tires</td><td>TREATMENT: Ivermectin 200 mcg/kg x 1 dose</td><td>Wash head frequently</td><td>If infection suspected: Send to next level of care</td></tr>
</table>

VAGINAL DISCHARGE

A little vaginal discharge is normal. More than a little may be abnormal. It can be tough to tell the difference when one's only tools are the history and physical exam during one visit.

- Cultural considerations are important – Consider separating sexual partners; use tact.
- Ensure privacy with tarps; use sheets and tarps to make a bed if no beds are available in clinic.
- All women should be asked about vaginal discharge
- If a vaginal exam is required. *Send to the next level of care.*

MANAGEMENT

Education
TEACH: Female hygiene
TEACH: Safe sexual practices and prevention of HIV
Avoid vaginal agents and douching
STD: no sexual contact until medication completed
No ETOH on metronidazole (Flagyl)

CONTRACEPTION

- Cultural considerations are important – Consider separating sexual partners; use tact.
- Ensure privacy with tarps; use sheets and tarps to make a bed if no beds are available in clinic.
- Offer and provide a pregnancy test if appropriate

Management

EDUCATION	MEDICATION
TEACH: Cycle beads	We do not provide oral contraceptives or other forms of contraception in clinic.
Prevention of Sexually Transmitted Diseases	We may have condoms – provide and counsel as appropriate
Safe sex and HIV/AIDs prevention	

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