Books for Clinical Care at the LDC District Hospital

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2009

Prepared as part of an education project of the Global Health Education Consortium and collaborating partners
Learning objectives: Books for Clinical Care at the LDC District Hospital

1. Define the ideal roles of the District Hospital [DH] in a Less-Developed Country [LDC]
2. List 8-10 skill areas needed by clinicians at a DH.
3. Debate the utility of books vs. other information sources in daily clinical care in these skill areas.
4. Cite evidence-based care protocols and books arising from research and practice in LDC conditions.
5. Discuss the egalitarian learning legacies left by collaborative use of such books and protocols.
6. Purchase such resources for collaborative care.
A District Hospital in a L.D.C.
Why focus on the District Hospital [DH]?

- The District Hospital: “Where the rubber meets the road”
- WHO, echoing experienced clinicians, asserts that the DH is the level in any LDC health system at which physicians can make the largest differences in health.
- The DH is the bridge from the village care system to health care—in both clinical and public health care.
- One example, among many, is “Safe Motherhood:” Prenatal care and birthing at a health center relies on midwives as part of the District Health team, which sends birthing emergencies to physicians at the DH.
Children’s ward in a different, but also typical, LDC District Hospital

- Handbooks “work” when/where e-media fail—or never were available—and those are the crucial places of care.
- EBM protocols, identical for all clinicians, promote collaborative learning and egalitarian [vs.”expert”] care.
- National protocols, linked to the nation’s WHO Essential Drug list, lead to more cost-effective care for more citizens.
- Still, this stance encourages each individual clinician’s learning and advancement via all media available. Input from them leads to constant reassessment of protocols and the supporting national Essential Drug list.

*Evidence-based medicine
What is an ideal District Hospital [DH]?

• The DH serves the government’s administrative district, usually 100,000 – 500,000 citizens in a defined area. Some governments designate some NGO-sponsored hospitals as District Hospitals.

• The DH is the linchpin between the specialized provincial and/or national hospital[s] and each of these serves 100,000 – 500,000 people.

• The DH is staffed by “several” broadly-skilled generalist physicians, nurses, and technicians [e.g., lab, radiology, operating theatre, IV fluid manufacture, etc].

• The DH is the hub for local clinical & public health outreach/supervision for all the District’s citizens.
CORE SKILL AREAS AT THE DISTRICT HOSPITAL

- Generalist in primary and secondary care, including community public health, under resource constraints
- Maternal Care: “Safe Motherhood” and obstetric care
- Sick Children: Integrated Management [IMCI]
- Nutrition in Maternal-Child Health
- Adults who are Sick: Acute and Chronic Care
- Trauma and Surgical Care
- Mental & Spiritual Health
- Hospital & Community Health Team Leadership

We will follow this sequence in this module....
CLINICIANS’ ROLES IN LDC HEALTH CARE: Generalist in primary and secondary care

- Cook GC, Zumla A, eds. Manson’s Tropical Diseases. 23rd ed. Saunders; 2003—See next slide for above 3
- See also standard management handbooks for your nation, often adapted from WHO protocols


Cook GC, Zumla A, eds. Manson’s Tropical Diseases. 23rd ed. Saunders; 2003
PERTINENT PRACTICAL RESOURCES: NATION OR REGION-SPECIFIC

• On arrival [or before] contact the Ministry of Health or the WHO or NGO office in the nation where you will work to ask for locally-approved clinical guidebooks.

• These are typically adapted from international sources depicted in later slides in this module.
Clinical Guidelines—global [MSF], national [Kenya] and local [Chogoria “district” Hospital]
Guidelines must be up-to-date! and evidence-based!
GENERALIST SKILLS IN GLOBAL PUBLIC HEALTH: Some overviews


» See next slide
Merkle, Merson, and Osborne references in Global Public Health
Hesperian’s Manuals in many languages for para-medical training
MATERNAL CARE AND “SAFE MOTHERHOOD”: 2nd Skill Area at DH
MATERNAL CARE AND “SAFE MOTHERHOOD” [I.M.P.A.C.]


  See next slide for these manuals…
IMPAC [WHO], Safe Motherhood [Marie Stopes UK], and Mola [PNG] books

Of the 9+million child deaths under 5 years, neonates [<1 month old] now account for ~40%.
Primary Care OB handbooks from East Africa, UK, and USA
Technique handbooks for specific problems in Ob-Gyn
Practical Obstetrics and Midwifery manuals from the U.K.
Hesperian’s books for midwives and women’s health in many languages
Women’s health handbooks from a variety of sources: WHO, TALC, CDC
SICK CHILDREN: 3rd Skill Area
Integrated Management of Childhood Illness
[ I.M.C.I. ]
IMCI [summary of research in *Bulletin of WHO, 1997*] led to Pocketbook by 2005:


National sick child care manuals usually are based on IMCI research.

Some [as these in Papua New Guinea] were published earlier than WHO’s *Handbook of Hospital Care for Children*. 
NUTRITION IN MATERNAL-CHILD HEALTH: 4th Skill Area

• Jelliffe DB, Jelliffe EFP. *Growth Monitoring and Promotion in Young Children*. Oxford University Press; 1990.


See next slide…
Nutrition guide books from MSF and Teaching Aids at Low Cost [TALC]
Nutrition manuals MUST adapt to each nation’s specific foods:
One good example of an international / British Commonwealth book
adapted by Papua New Guinea, a Commonwealth member nation

• King FS, Burgess A. *Nutrition for Developing Countries*. 2nd ed. Oxford Press; 1992. [English Language Book Society; the ELBS low-priced series is sponsored by the British Government]

Further focus on topics in Nutrition…

- Tratamiento de la Malnutricion Grave. WHO; 1999. [also in English]
ADULTS WHO ARE SICK: 5th Skill Area

• Until the AIDS epidemic, adult illnesses, especially those which are chronic, had little emphasis in global health guidelines [although a few LDCs have long had adult illness protocols, often for acute diseases]

• Integrated Management of [Adolescent and] Adult Illness [IMAI], new protocols patterned after IMCI, are now developing under WHO at URL: http://www/who/int/hiv/pub/imai/en/

• First titles in IMAI cover adult AIDS-related illnesses, e.g.:
  Chronic HIV care with ARV therapy
  General principles of good chronic care
  Palliative care: symptom management and end-of-life care
  Tuberculosis Care with TB-HIV Co-Management
ADULTS WHO ARE SICK WITH SPECIFIC INFECTIOUS DISEASES: 3 Global Fund diseases


See following 3 slides…
Tuberculosis Manuals from [left to right]: WHO, UK [Crofton/TALC], Kenya [Ministry of Health], and USA [CDC and Partners in Health]
Malaria handbooks:


Kenya. Min. of Health: National Guidelines for...Malaria, 2003
Skin Diseases are common all over the world, sometimes baffling in tropical LDCs
Regional Manuals [Africa] of Skin Diseases; Leprosy is among them
ADULTS WHO ARE SICK: Chronic Disease

….a neglected and burgeoning need in all LDCs, especially in the growing cities.

Here is the first textbook on…

*Diabetes in Africa*, ed. by Gill, Mbanya & Alberti: London: FSG [sponsored by DFID of the UK]
TRAUMA AND SURGICAL CARE: 6th Skill Area
TRAUMA AND SURGICAL CARE: 6th Skill Area


These 3 books [A4 size=20.5 x29.5 cm], along with an anatomy atlas, can be placed on a second Mayo stand in the O.R., giving enough detail to complete any surgery. Written by multi-national surgeons working in Africa, they are all you need.

See next slide…

[see also Maternal Care: 2nd Skill Area – for operative obstetrics]
The Oxford/GTZ “Primary Surgery” books on operative procedures
Despite Grant’s Anatomy Atlas in the O.R., some “surgeons” still manage to cut the palmar arch—note the arterial blood on the Atlas page.

On right: Bailey’s Emergency Surgery; an edition about 20 years old may be better than the newest, since you likely will not have the latest surgical gear.
Sir Zachary Cope’s invaluable classic—from 1921 to the present
120 DIAGNOSIS OF THE ACUTE ABDOMEN

may be too paralysed to allow any natural movement of the bowels, though an enema may evacuate fecal contents. There are many acute cases in which constipation should be regarded as a sequel rather than a symptom, for valuable time may be lost in the attempt either to open the bowels or prove the obstruction exists. If the other symptoms of intestinal obstruction are present it is unwise to wait twelve or twenty-four hours to demonstrate constipation. It is advisable to point out that in acute intussusception there is occasionally incomplete obstruction, so that some brown or

Fig. 16.—Drawing to show ladder pattern of abdominal distension (indicating obstruction of the lower ileum).

deed because of the relative slightness of the pain and vomiting, but the distention in these cases is allowed to proceed so far

Distention at first may be merely local, due to the dilatation of the gut immediately above the obstruction. In some cases, where the clinical examination does not show any definite distention, a palpation may reveal local distention of the intestine. In obstruction of the end of the ileum, a local hypogastric distention may first be observed, due to volvulus of the sigmoid, the outline of the affected end of large bowel may stand out very distinctly. In subacute or partial obstruction of the lower end of the small bowel, the distention gradually affects the whole coil, so that when the patient comes under observation with acute symptoms, the typical ladder-pattern type of distention is seen on looking at the abdomen (Fig. 23). In general, the more distal the obstruction, the greater the degree of distention. But distention may be minimal or absent in the earliest stages of strangulating obstruction because patients usually seek advice early, owing to the severity of the pain.

Tenderness. Tenderness of the abdomen is not usually felt until distention appears. Pressure over a distended coil is generally painful.

Fig. 23. The ladder pattern of abdominal distension (indicating obstruction of the lower ileum).
Much of the surgery in LDCs is trauma and orthopedics, usually treated by closed reduction when possible, followed if necessary by skeletal traction [see next slide]
Kirschner wire in position for use in obtaining skeletal traction through the ligaments of the elbow joint in fracture of the humerus.
Trauma, infection or birth defects often lead to disability. Hesperian’s manuals teach how to help at the District Hospital and village levels.
Dental conditions are the most prevalent disease in the world. Hesperian’s Dental Manual by dentist Dr. Murray Dickson
Eye care is a most useful skill. Visiting eye surgeons make major differences in individual patients.

Here are British and American manuals.

MENTAL HEALTH

• Patel V. *When There is No Psychiatrist*. Gaskell (Royal College of Psychiatrists), 2003.
Hospital & Community Health Team: 8th Skill Area
Making it run—administration and epidemiology


See next slide…
Hospital & Community Health Team: 8th Skill Area
Making it run—administration and epidemiology
Equipping and running a hospital, its operating room, lab, radiology and…
…interpreting radiographs.

- **WHO:** *Manual of Radiographic Interpretation for General Practitioners.* WHO; 1985.
- [same title in Spanish]
- Daley CL, Gotway MB, Jasmer RM. *Radiographic Manifestations of Tuberculosis.* 2nd ed. San Francisco, CA: Francis J Curry National Tuberculosis Center; 2006. [free from that source]
TEAM LEADERSHIP

8TH Skill Area..concludes the 8 Skill Areas in this GHEC Module:

Strengthening your hospital’s Community Health Program is a key Role in leading the District Health team.

YOU will carry forward a 40-50 year old struggle:
Clinical & community care with limited resources

King M. Medical Care in Developing Countries. Nairobi: Oxford; 1966.


Two of the books that started the Global Health movement, clinically
National clinical guidebooks in use by staff at District Hospital
PUBLISHERS AND SOURCES OF SOME OF THE RESOURCES CITED IN THIS MODULE

• World Health Organization. (WHO). http://www.who.int
  Blue Trunk Libraries: selected books for District Hospitals, etc

• TALC and AMREF [see below] also sell books sets for district hospitals. These sets include many cited in this module.

• Pan American Health Organization. (PAHO)
  http://www.paho.org Many WHO and PAHO titles in Spanish.

  continued…

- Teaching Aids at Low Cost. (TALC). PO Box 49, St. Albans, Herts, AL15TX, UK. http://www.talculk.org infor@talculk.org

  TALC selects the most practical books from various publishers and distributes them in LDCs at subsidized prices; TALC offers many more titles in its online catalog. Electronic Teaching-Aids at Low Cost (e-TALC) is a collaborative project to distribute free up-to-date health and development information on CD-Rom. E-Talc, Unit 13, Standingford House, Cave St., Oxford OX4 1BA, UK http://www.e-talc.org info@e-talc.org

  Continues…
• African Medical and Research Foundation. (AMREF). PO Box 30125, Nairobi, Kenya or 19 West 44th St, Suite 1708, New York, NY 10036.  http://www.amref.org

[AMREF also sells low-priced book sets in Africa]

• The Hesperian Foundation: Palo Alta. PO Box 11577, Berkeley CA 94704  http://www.hesperian.org  [Hesperian produces books for LDC paramedicals]


• Medecins Sans Frontieres/Hattier. 8 Rue Saint-Sabin, 75011 Paris, France, or Doctors without Borders, USA, Inc., 6 E 39th St, 8th Floor, New York, NY 10016. http://www.msf.org [treatment manuals for disasters]


• Global Health Education Consortium (GHEC): http://www.globalhealth-ec.org [sponsor of this module!]

• FURTHER INFORMATION ON THESE RESOURCES? Contact Ronald Pust, MD at rpus@u.arizona.edu
COMPREHENSIVE CLINICALLY-ORIENTED COURSES/CURRICULA

• American Society of Tropical Medicine and Hygiene. Diploma Courses in Clinical Tropical Medicine and Travelers’ Health. 
  http://www.astmh.org/certification/certificate.cfm

• University of Arizona. Global Health. 
  http://www.globalhealth.arizona.edu/
Putting all this together in Arizona

Global Health: Clinical and Community Care—”The Arizona July Course”

http://www.globalhealth.arizona.edu

Course Description: The University of Arizona summer course, revised annually since 1982, is a small group, problem-solving course preparing fourth year [North American] medical students, primary care residents and other clinicians for health care experiences in LDCs. In a 3-week, full-time [70 contact hours], intensive, interactive course, multi-disciplinary faculty with LDC clinical experience guide clinicians in adapting clinical and WHO public health skills in resource-poor nations. Visiting learners receive three weeks’/one month’s elective credit at their home institute [which must also arrange the actual overseas preceptorship]. Tuition free to North American LCME medical students.

Not surprisingly, this course relies on international [non-USA] background sources—like those in this module—that are evidence-based and tested in resource-poor regions of LDCs.
The 3 handbooks used as “required texts” in the Arizona July Course—all are featured earlier in this GHEC Module and in use worldwide.
Summary of Module: Books for Clinical Care at the LDC District Hospital

You have viewed and considered:

• The role of the District Hospital in Less-Developed Countries
• The skill areas needed by clinicians at DHs in LDCs
• The pros and cons of LDC-derived books for these skills
• Numerous examples of such handbooks in each skill area
• Sources from which to purchase these resource materials for yourself or to provide at LDC sites where you work
• One “shameless commercial” slide for a free Arizona course
• A brief quiz on this content  Sorry, no CME credit…yet
Credits

The author of this Module, Ron Pust, MD, of College of Medicine, University or Arizona in Tucson, thanks all of the Summer Course participants, including visiting faculty, for volunteering a part of their lives to pass on their LDC-derived skills.

He gives special thanks to Course Co-Directors, Tracy Carroll, MPH, Susan M. Berryman, CHES, to Course Administrator Arleen Heimann, and the Dept. Chairs who have permitted this course since 1982—and to the 500+ co-learners who have endured it, then gone to the far corners of the planet.
The Global Health Education Consortium and the Consortium of Universities for Global Health gratefully acknowledge the support provided for developing teaching modules from the:

Margaret Kendrick Blodgett Foundation
The Josiah Macy, Jr. Foundation
Arnold P. Gold Foundation

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