Partnership’s effort to shape pharmacy education in Ethiopia

Teferi Gedif, BPharm, MPH, PhD
Dean, School of Pharmacy,
Addis Ababa University

Boston, MA
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Outline

• Background about AAU
• School of Pharmacy, AAU
• Paradigm shift in health care and Pharmacy
• Partnership with Howard University & its contribution to shape Pharmacy Education in Ethiopia.
1950:
- University College of Addis Ababa was founded
- With 71 students and 9 academic staff

AAU today...

Table: Colleges, faculties, schools, institutes and centers at AAU housing various disciplines (in 14 campuses) - 28

<table>
<thead>
<tr>
<th>Colleges</th>
<th>Social Sciences; Education; Development Studies (with 5 institutes); Commerce</th>
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<tbody>
<tr>
<td>Faculties</td>
<td>Science; Technology; Medicine; Veterinary Medicine; Business &amp; Economics; Law; Informatics; Journalism and Communications</td>
</tr>
<tr>
<td>Schools</td>
<td>Pharmacy; Social Work; Music; Fine Arts and Design</td>
</tr>
<tr>
<td>Institutes</td>
<td>Language Studies; Pathobiology; Educational Research; Ethiopian Studies; Geophysics, Space Science &amp; Astronomy</td>
</tr>
<tr>
<td>Centers</td>
<td>Ethiopian Languages Research; Peace and Security; Federalism; African Studies</td>
</tr>
<tr>
<td>Multi-disciplinary Centers</td>
<td>Water &amp; Development; Urban Growth &amp; Development; Food Security;</td>
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</tbody>
</table>

AAU today...

Student enrollment:
- UG about 50,000 (Regular + Evening + Summer)
- Graduate about 6,000

Academic staff:
- About 2,070 academic staff
- Full-time Ethiopians ~ 1700
- Part-time Ethiopians ~ 250
- Expatriates ~ 120
School of Pharmacy

- Established in 1961 as a unit in the Faculty of Sciences.
- 1978: became full-fledged Faculty
- Organized into four traditional Departments: Pharmacology, Pharmaceutics, Pharmacognosy and Pharmaceutical Chemistry

Student enrollment:

- UG regular 350
- UG evening 350
- Graduate students 90

Academic staff:

- 50 academic staff
  - Full-time Ethiopians ~ 37
  - Part-time Ethiopians ~ 10
  - Expatriates ~ 3

A New Health System for the 21st Century

- Evidence-Based Practice
- Chronic Disease management
- Patient centered
- Informatics
- Interdisciplinary Approach
Changing role of a Pharmacist

• Focus moves from:
  – Product to patient
  – Knowledge of drug product/drug delivery system to knowledge of disease and therapeutics.
  – Record keeping to satisfy legal requirements to evaluate patient outcomes
  – Inventory generated revenue to reimbursement for cognitive services

↓↓
Supply function to Pharmaceutical care

Practice and curriculum

2004/2005:
• Are practicing pharmacists in Ethiopia ready to deliver Pharmaceutical care?

• Is our curriculum fit for practice in clinical arena?

Rationale for the partnership

• Global trend in pharmacy education (fit-for-practice curriculum)
• The increasing case load of HIV/AIDS in the country
• Appreciation of the role of pharmacists in chronic disease management
• Partnership came into being in November 2006
Need assessment

- Task force established comprising AAU, HU & AIHA
- Need assessment studies carried
  - 672 health care professionals participated in the
- Professionals were surveyed in three areas of pharmacy practice: Drug Information Services, Continuing Education and Clinical Services

Results: Gender Mix

- Male: 64%
- Female: 36%
Professional background

- MDs: 26.5%
- RPhs: 15%
- RNs: 37.5%
- Health Officers: 4%
- Others: 17%

Place of employment

- Public Hospital: 58%
- Academia: 14%
- Regulatory Agencies: 23%
- NGO: 3.7%
- Private Hospital: 16.2%

Years of services

- < 10 years: 38.7%
- 11 to 20 years: 42.5%
- 21 to 30 years: 14%
- 31 to 40 years: 3.7%
- > 40 years: 1.6%
Drug Information Resources

2/3 of Health Care Professionals have a limited or no library services or updated medical and drug references to provide informed patient care decisions.

For those who have access to library resources, the most common type of references available are textbooks (most of them outdated).

Library access

Demand for establishing DIC

No Support 3%
Full Support 97%
Continuing education

- Attended at least once: 40%
- Never attended a CE Program: 60%

Need for CEPs

- Physicians: 72%
- Nurses: 83%
- Pharmacists: 92%

Over 60% of the respondent said they had never received continuing education on drug-related issues.

Over 97.2% percent of the respondents are interested in attending a continuing education on a regular basis if available.
Needs assessment cont’d.

- 95% interested in providing such service if proper training is given
- Unanimous support across all ages and practice for the establishment of a Pham.D. program
- About 90% of participants are willing to have pharmacy students train under their supervision

Goal of the Partnership

“Enhancement of sustainable human and organizational capacity to provide quality pharmaceutical care to patients with HIV/AIDS and related diseases in Ethiopia”

Objectives of the partnership

- Strengthening the capacity of SoP, AAU to provide evidence-based, unbiased, and up-to-date pharmaceutical information for faculty and students
- Establishing a model Continuing Pharmacy Education program at SoP for practicing pharmacists to build their capacity to deliver quality pharmaceutical care
Objectives contd.

- To introduce a center of excellence in clinical training of faculty, practitioners, and students so as to provide pharmaceutical care service to HIV/AIDS patients

Activities accomplished

Objective 1: Drug Information

- Two faculty that act as director and deputy director of the DIC trained in South Africa
- 35 ToTs trained on concepts and practices of drug information (three rounds of training)
- Drug informatics included as a course in the pre-service curriculum
TOTs by Howard Faculty

Official inauguration of the DIC

DIC inauguration
Guideline for the continuing education program was developed.
Curricula for Postgraduate certificate and Diploma in three areas (Clinical pharmacy, Community Pharmacy and Manufacturing & Quality Control) were prepared.
Documents approved by AC of the SoP & submitted for approval by the Graduate Council of the University.
TOR for developing modules for the program prepared and proposed budget submitted.
Objective 3: Clinical oriented curriculum

- 16 Faculty (6 clinicians and 10 pharmacists) trained as preceptors
- Workshop on the changing role of pharmacists conducted in August 2008 for SoP Faculty
- MTM training given to 40 Faculty from 7 Schools of Pharmacy
- Training on Pharmacotherapy for 40 Faculty Members being under way.

Preceptorship training

Clinical oriented Cont’d

- The HU team met with the curriculum revision committee to share experience of HU
- A patient oriented curriculum developed, enriched, harmonized, approved and being implemented
- Workshop on the theme "Pharmacy Education in the 21st Century conducted (May, 2009)."
Science vs. Practice

- “How much science should be in the curriculum? What types of practice experience should be included? How are they evaluated?”
- Balance can be complex and may be heavily influenced by the professional needs of a particular country

Old vs. new curriculum

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<tr>
<th>Parameter</th>
<th>Old</th>
<th>New</th>
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<tbody>
<tr>
<td>Duration of training</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Total credits</td>
<td>139</td>
<td>147</td>
</tr>
<tr>
<td>Biomedical &amp; natural sciences</td>
<td>23%</td>
<td>16.3%</td>
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<tr>
<td>Pharmaceutical Sciences</td>
<td>43.2%</td>
<td>34%</td>
</tr>
<tr>
<td>Behavioral, Social &amp; administrative Pharmacy</td>
<td>10.1%</td>
<td>13%</td>
</tr>
<tr>
<td>Pharmacy Practice</td>
<td>9.4%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Experiential training</td>
<td>2.9%</td>
<td>3.3% + 32 weeks internship</td>
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Experience sharing among students
Challenges

- Physical space for the DIC
- Lack of core faculty for the clinical-oriented program
- Resistance from some Faculty to change the curriculum
- Feasibility of launching PharmD program

Mitigation strategies

- Continuous engagement on consensus building exercise
- Using clinical staff of AAU
- Using fly-in professors to teach in block mode
- Recruiting volunteers through AIHA scheme
- Online training through the non-traditional PharmD scheme
Acknowledgments

- AIHA/TC: Jim, Amanda, Laura (DC office) and Mamae and Kidist from Ethiopia office
- Howard University: Bisrat, Dean Kelly, Nooren, Moen and all Faculty Members of the College of Pharmacy, Nursing and Allied Health Sciences (HU)
- Lucinda Maine, CEO AACP

Memories of Faculty Exchanges

Vice provost of AAU with Howard Faculty
Curriculum development meeting

Faculty Development in support of patient oriented curriculum

Community pharmacy in Ethiopia
EASP established

Dean Kelly inspiring young Ethiopians
Pharmacy education in the 21st century: strategic vision and direction

Formation of global alliance enhance quality education and practice wherever we are

Thank You