

**EDUCATION & TRAINING IN CANCER
RESEARCH METHODS FOR
PROFESSIONALS IN DEVELOPING
COUNTRIES**

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Background

- Research collaborations
- USA / Egypt, Tunisia
- Epidemiology
- Breast cancer (IBC)
- 2001 - present

Epidemiology of Breast Cancer

USA

- ◎ 32% of female cancer
- ◎ Median age 52
- ◎ Early presentation

Egypt & Tunisia

- ◎ 16 % of female cancer
- ◎ Median age 42
- ◎ Late presentation

IBC Facts

- ① Seen in younger women
- ① Pre-menopausal
- ① Aggressive



Epidemiology of IBC

USA

- ⊙ < 1% of all breast cancer
- ⊙ Older age (mean = 57)
- ⊙ 3-yr survival 42% compared to 85% for all breast cancer

Egypt & Tunisia

- ⊙ ~10-15% of all breast cancer
- ⊙ Younger age (mean = 42)
- ⊙ 3-yr survival 15% compared to ~ 50% for all breast cancer

Methodologic Topics

- Establishing variables for cases
- Clinical presentation
- History of onset
- Pathologic findings

Clinical Breast Exam for IBC



- ◎ **Swollen**
- ◎ **Erythema**
- ◎ **Peau d'Orange**

Additional methodologic topics

- Establishing control subject selection
- Geographic
- Age
- Health status
- Recruitment of controls

Geographic Cases & controls from same city

- Ministry of Health Cancer Centers
- University Cancer Centers



Geographic

Cases & controls from same city

● Ministry of Health
Cancer Centers

■ University Cancer
Centers



Scientific Collaborations

- Require a common understanding of specialized science
- Require similar experience in research
- Require a shared understanding of limitations

Collaborating in cancer epidemiologic research: *Our experience*

- Physicians are not epidemiologists
- Epidemiologists are not clinicians
- Physicians & epidemiologists are not pathologists
- There are very few exceptions

Collaborating in cancer epidemiologic research: *Our experience*

- Cultural & international differences are not obvious
- Local medical practices differ
- Patient preferences differ
- Cancer referral patterns are unique
- Clinical resources for treatment differ

Solutions, based on our experience

- Brief training overview for senior medical officials 1-2 weeks
- Training for potential physician collaborators ... in the host country or region 4-8 weeks
- All training should be research problem based ... teach with examples

**Thank you ...
QUESTIONS ??**

