Breast Cancer Screening in the Middle East

By
Prof. Ashraf Selim, MD
-Head of Women's Imaging Unit,
Radiology Department, Cairo University
-Breast Screening Consultant
Women's Health Outreach Program
-President of Egyptian Society of Women's Imaging & Health Care

Middle East


Turkey
Cyprus
Syria
Lebanon
Israel
Iraq
Iran
Jordan
Kuwait
Egypt
Bahrain
Qatar
Saudi Arabia
UAE
Oman
Yemen

Over view

Current Status Based on available Data

Countries:

- Saudi Arabia
- Kuwait
- UAE
- Iran
- Lebanon
- Jordan
- Sudan
- Yemen
- Egypt

Problems Faced

Solutions

Conclusion

Current Status

	Saudi Arabia	Kuwait	UAE	Iran	Lebanon	Jordan	Sudan	Yemen	Egypt
•Nation wide screening program ?	N	N	Y	N	N	Y limited	N	N	Y
•Has it been requested ?	Y	Y	Y	N	Y	Y	Y	N	Y
•Are there NGO or other efforts ?	Y	Y	Y	N	Y	Y	Y	N	Y
•Have there been studies on breast cancer?	Y	Y	Y	Y	Y	Y	Y	Y	Y

Trends in epidemiology and management of breast cancer in developing Arab countries: A literature and registry analysis☆

Nagi S. El Saghir*, Mazen K. Khalil, Toufic Eid, Abdul Rahman El Kinge, Maya Charafeddine, Fady Geara, Muhieddine Seoud, Ali I. Shamseddine

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Table 1 Clinical data for breast cancer in Arab countries

Country	Frequency data	Year(s)	No. of patients (pts) and type of registry	ASR (per 100,000)	Age at presentation	Ref.
Algeria	*	1990–1993	*	9.5	*	10
Bahrain	*	1982–1994	117 pts	*	*	48
Egypt	37.50%	2002–2003	Hospital-based	*	Median age: 49	12
	*	2003–2004	Hospital-based	*	*	12
	*	*	Regional (Alexandria)	*	*	13
	37.6%	1999	Regional (Gharbiah)	15	Median age: 48.7	11
Jordan	14.20%	1997	National	21.3	*	18
Kuwait	34.40%	*	258 pts (National)	32.8	78% < 50	20
Saudi Arabia	19.10%	1994–1996	1430 pts (national)	11.2	48.3	34
	*	1985–1995	292 pts		Median age = 42	36
Lebanon	23–35%	1964	Hospital-based	20	*	25
	27%	1984	1094 pts (National)	*	*	26
	35%	1982–2000	2673 pts (hospital-based)	30.6	Median age: 49; 49% < 50	21
	33%	1998 National	2092 pts (National)	46.7	Median age: 52; 50% < 50	22
Morocco	22.30%	1986–1987	5148 pts (hospital-based)	*	*	29
Oman	13.70%	1993–1997	1809 pts	13	*	8
	*	1993	152 pts	15.6	Mean: 48.5; 48% premenopausal	30
Palestinians	30%	1995	*	13.6 in Arab women vs. 102.2 in Jews	*	31
	*	1994–1999	65 pts		51.5	32
Syria	30%	1998–1999 (1 year)	230 pts	30.4	*	38
	*	*	*	*	*	39
Tunisia	*	1994	689 pts	16.7	Average age: 50	40
Yemen	*	1989–1996	225 pts	*	69% below 50	41

*Information not available.

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Table 2 Stage at presentation and mastectomy rate

Country	Mastectomy rate	Average tumor size (cm)	Stage at presentation	Ref.
Bahrain	*	70% >2	I: 6.8%; II: 51.3%; III: 21.4%; IV: 11.1%	48
Egypt	79.9–82%	*	III and; IV: 68%	12,13
Saudi Arabia	*	*	I: 9%; II: 44%; III: 30%; IV: 16%	36
Oman	65%	4.6	III: 34.9%; IV: 15.8%	30
Palestinians	70%	3.9	I: 23%; II: 43%; III: 33%; IV: 2% (+ve LNs 53%)	31
Syria	88%	*	*	39
Tunisia	82.40%	4.95	T1: 7.2%;T2: 48.9%; T3: 18.5%; T4: 23.4%; CIS: 3.3%; M1:22.1%	40

*Information not available.

Saudi Arabia

Qassim : january 2007

- 1 mobile, 7 fixed analog and digital

Riyadh : September 2007

- Abdulateef Charitable Screening Center To Screen for Breast, cervix, colon, prostate.
- One fixed mammo unit : until Aug 2010 (6587 mammograms.136 proved cancer.)

In the East : October 2009

- 1 mobile unit.
- 1200 mammograms, detected 8 cancers

Courtesy of Dr Fatina al Tahan
Director of Radiology and Female section
Abdullatif Cancer Screening Center
Saudi Cancer Society
Riyadh - KSA

Kuwait

- 2008-2009 : Two sponsored pilot screening studies, not government funds, in collaboration with kings college, UK
- Total 2700 mammograms , 16 cancers
- Intense campaigning using all media cover
- In 2010, no funds were available for screening.

Courtesy of Dr Nour al hoda Karmani

Founder of Breast care Kuwait

Head of breast imaging unit - Al Sabah hospital. Kuwait

UAE

- Dubai Zabeel Park had the world's largest ribbon and was entered into the Guinness Book of World Records.
- Measuring 29 metres and made up of 105,000 carnations,
- The event was organised by Dubai Healthcare city

- US \ UAE partnership 2006
- Jan 2008 : Tawam hosp mobile mammo van in affiliation with Johns Hopkins
- March 2008 : National health insurance free mammograms.
- 7 cancers per thousand

Iran

Muslim breast cancer survivor spirituality: coping strategy or health seeking behavior hindrance?

Harandy TF, Ghofranipour F, Montazeri A, Anoosheh M, Bazargan M, Mohammadi E, Ahmadi F, Niknami S.

Department of Health Education, Tarbiat Modares University, Tehran, Iran.

- Concluded that spirituality is the primary source of psychological support among participants.
- Almost all participants attributed their cancer to the will of God. Despite this, they actively have been engaged with their medical treatment.
- This is in surprising contrast to Western cultures in which a belief in an external health locus of control diminishes participation in cancer screening, detection, and treatment.

Lebanon

- **No Nation Wide screening**
- **Several NGO efforts. MOH focused on awareness and media campaigns, but no free screening.**

Breast cancer in Lebanon: incidence and comparison to regional and Western countries.

Lakkis NA, Adib SM, Osman MH, Musharafieh UM, Hamadeh GN.

Department of Family Medicine, American University of Beirut Medical Center (AUB-MC), Riad El Solh, Beirut, Lebanon. ne23@aub.edu.lb

- Review and analyses of the 2004 Lebanese National Breast Cancer Registry (the most recently available complete national data). Breast cancer constituted about 38.2% of all cancer cases among Lebanese females in the year 2004.

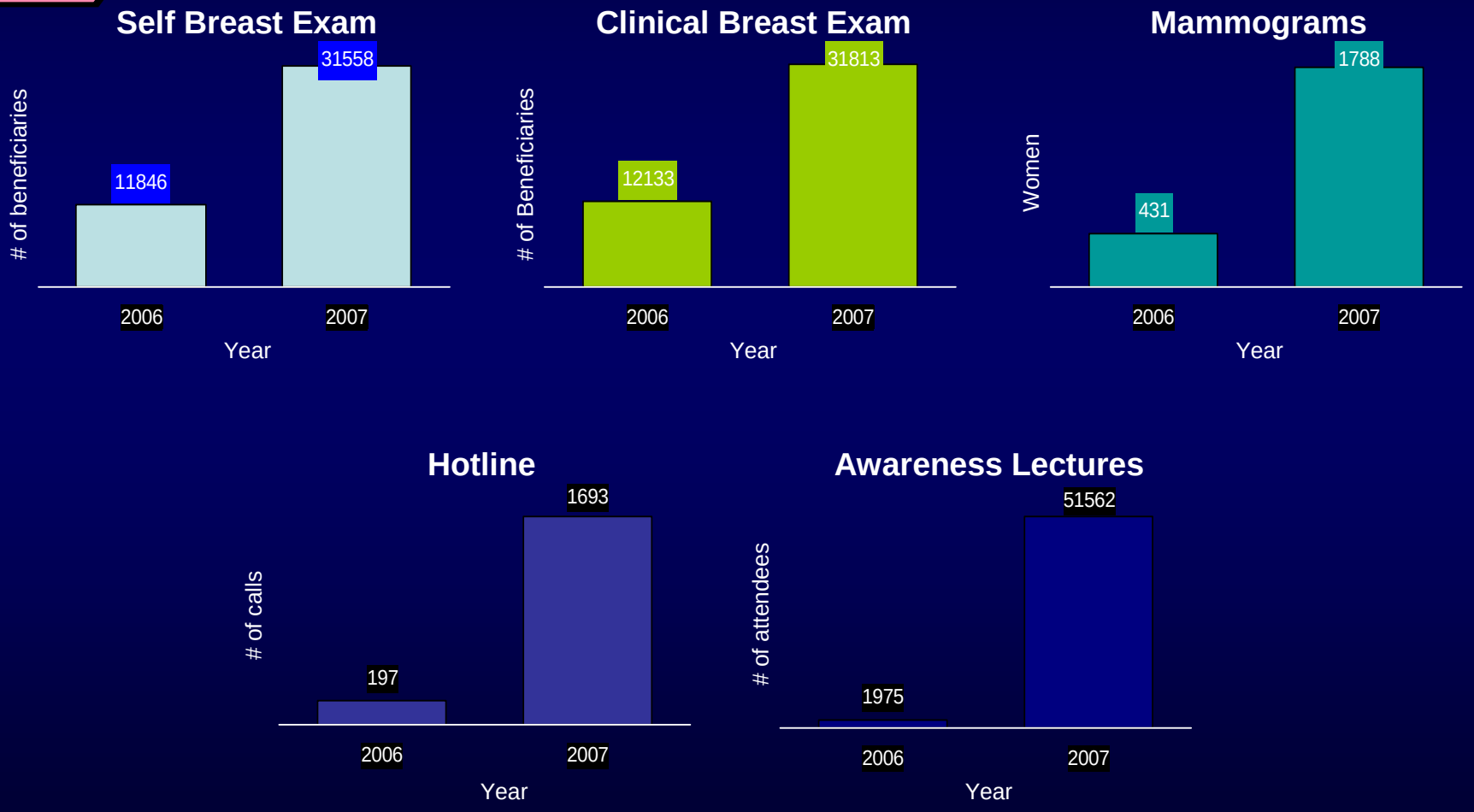
Jordan

- Nation wide program established 2007
- 70% of cancers were late stage in 2008
  37% of cancers were late stage in 2009

The Jordan 2007 October campaign reached 3 times as much of the target population than in 2006

2 Mass Awareness Campaigns

Comparison of the October Campaigns 2006 and 2007



Sudan

Mo Ibrahim
FOUNDATION

- Khartoum Breast Care center Launched 2009

Yemen

- **Awareness and practice of breast cancer and breast-self examination among university students in Yemen.**
- Ahmed BA.Department of Community Medicine and Family Health, College of Medicine, Hadrmout University of Science and Technology, Hadrmout Governorate, Republic of Yemen. aabaamer@maktoob.com

- **CONCLUSION:** the majority of participants heard about BC, but their knowledge and understanding of the disease was very low. The most known method of BC detection was BSE, however the majority never practice it due to lack of knowledge about technique.

The Egyptian National Breast Screening Program was launched on 28th October 2007

صحة المرأة

البرنامج القومي لصحة المرأة

Women's Health

Women's Health Outreach Program

In Egypt, the National Women's Council announced that Breast Cancer represents :

- 33% of all female cancers
- 10% of cases metastatic at presentation
- Average size at presentation 4.5 cm
- Average age of presentation 10 yrs younger than the west

7 – 8 million Ladies over 40 years

So, were there mammograms done before Oct 2007 ?

Yes

- Screening Mammograms performed at the private sector for elite women who choose to be screened as they have breast cancer awareness.
- Diagnostic Mammograms were done mainly for poor underserved women who have symptoms, usually a large lump, at private centers as well as government and university hospitals.
- Some NGOs offered free screening to underserved women through sponsors.

Aims of WHOP

- To Promote awareness on breast health to all age groups, through public figures, religious figures, media (TV, Newspapers, flyers, advocates)
- Reach all asymptomatic women above 45 and invite them for a screening mammogram, free blood sugar testing, blood pressure measurement and body mass index; by screening four major diseases (Breast Cancer, Hypertension, obesity & Diabetes).
- Teach monthly breast self examination
- Reach the under served and remote areas & give them the same urban health care opportunities.
- Implement PACS into ministry of health hospitals.
- Initiate a nucleus for electronic medical records (EMR).
- Teach junior doctors remotely through PACS Telemedicine, and overcome shortage of well trained radiologists.

What did we begin with ?

We started on the 30th of October 2007 by a 1 year Pilot phase through:

- 4 Mobile FFDM units
- 1 fixed FFDM unit at Cairo university
- A center of excellence
- Linked by DSL & Satellite

Mobile Units

Mobile units

- Two standard mammographic views are performed (CC & MLO) on each side .
- The computer system is fed with the medical history, BP, BS, and patient ID number.

Fixed Units

- Cairo University

Center Of Excellence

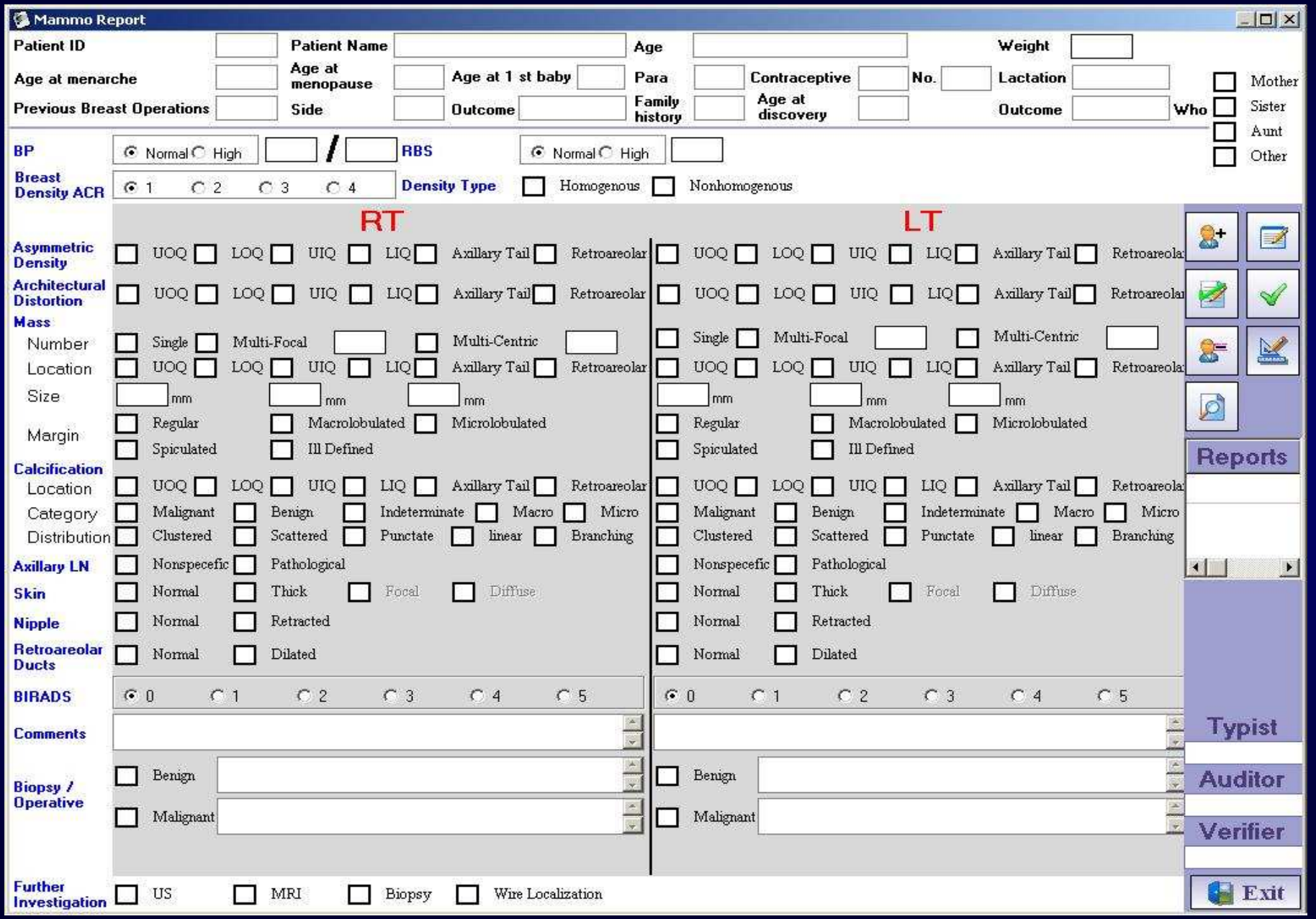
Work Flow System

- Images & patient data are sent through the computer system to the National Breast Screening Center (Center of Excellence) via video SAT & ADSL, where a team of 25 radiologists are based.
- Images with full patient and exam information are received by (PACS).
- Images displayed on 5 Mega Pixel Gray Scale diagnostic monitors.

Work Flow System

- Reporting is done by two readers. A 3rd reader is called for in cases of discrepancy.
- Final Diagnosis is done according to the ACR’s BI-RADS score.
- Report is sent by email back to the Van.

BIRADS Report



BI-RADS

1,2

Normal/ Benign

Annual screening

3

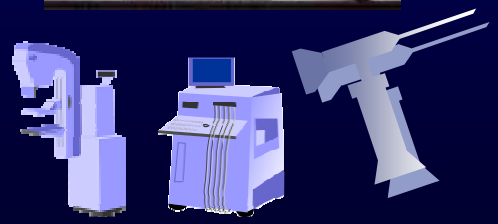
Probably Benign

receive a detailed report with a recommendation for US

4,5

Suspicious/Malignant

referred to the breast imaging assessment clinic at Cairo University Hospital to perform more tests.



BI-RADS

3,4,5

(Call Back)

Assessment Clinic

-ve

Annual screening

+ve

Surgery/ Oncology Departments

Each patient is guided through an organized circuit in collaboration with a surgeon, pathologist and oncologist.

All our services; both diagnostic & therapeutic are done free of charge

What Have we achieved

- No. of Cases Screened : 70,147
  - Areas Visited :

Cairo

Suez

Ismailia

Damanhour

Alexandria

Results

From October 2007 through December 2010, **70,147women** were screened for breast cancer, hypertension, diabetes, and obesity

1427 (2.03%) women were radiologically positive for Cancer

of these, only **708 (49.6%)** women agreed to be recalled for assessment

Of these,327 (46.2%) were confirmed to be true positive

381(53.8%) were false positive

719(50.4%) are under investigation, refused or escaped biopsy.

Achievements

- The National Foundation for Breast Cancer Elimination was established for fund raising.
- Website: www.whop.gov.eg
- Call center: 19507
- Media Campaigns 2008 / 2009 /2010
- Training certification program for mammographers October 2009
- International participation

International Participation

- ASCO , Orlando- Florida : June 2009
- ECR, Vienna- Austria: March 2010

- WHOP nominated by the WHO for the Technology in Government in Africa Award (TIGA) in 2009

WHOP Booth in Clubs

Fund Raising Items

Women's Health Outreach Programme Promotional Items

2010 Calendar

35 EGP

Postcards

10 EGP

Mug

15 EGP

Towels: Small size 32X32cm = 10 EGP, large size 50 X70 cm=20 EGP

T-shirts

35 EGP

Pin

10 EGP

Block note

20 EGP

Bags

35 EGP

1053 FUM El-Khalig – kornish El-Nil – Tel/Fax: +(202) 238 45 813 – Email: info@whop.gov.eg

Problems Faced: In Egypt

- Although Cairo is the most developed city in Egypt, there is still lack of breast cancer awareness, especially in the under served areas.
- Some women who have detected early breast cancer on our screening program have escaped or refused any further treatment.
- Budget restraints to sustain free services.
- Lack of well trained Female radiographers and radiologists.
- Technical problems(IT, Connectivity…)

Future Plans: In Egypt

- The WHOP is seeking International Accreditation

- Breast Cancer is now a priority for the Ministry of Health, with 10 fixed FFDM units implemented in its general hospitals in the remote governorates and 4 more vans to be implemented during this year.

- A 5- year plan has been established to cover all 29 Egyptian Governorates.

Problems Faced:
In rest of Middle East

According to results of the "Middle East Breast Cancer Screening workshop" held in Riyadh, March 2010:

Professional

- There is poor health awareness among public & health providers especially primary care physician regarding breast cancer etiology, risk factors, clinical features, detection and management.
- Unclear referral system with difficulty of access to most of women to health care institute
- Most healthcare facilities are condensed in major cities with poor communication and coordination between health care providers.
- limited resources with manpower shortage , Lack of specialized healthcare physicians (Radiologist, Technician, Oncologist, Surgeons, Staff Nurses,)
- In spite of their active participation in public education and awareness there is poor collaboration between NGOs and Health institutes.

Problems Faced:
In rest of Middle East

According to results of the "Middle East Breast Cancer Screening workshop" held in Riyadh, March 2010:

Society

- The level of illiteracy is very high among all levels of women.
- Women with breast cancer are usually divorced or separated
- Especially in the gulf region, there is closed culture despite the availability of money.
- No society support , husbands , male members of family support is very minimal.
- Men are scared to marry daughters of women with breast cancer
- Inactive role for the media which is supposed to play a significant role in public awareness and education

Suggested Solutions

- **National screening programs** *should be under the Ministry of Health umbrella.*
- Proper development of an official training system for all required staff in the screening program in supporting specialties like Breast imaging , Oncology, Breast Surgery, health education and Breast Radiography, psychologist, etc…
- Improve the present referral system and ensure access to all cancer cases to oncology centers in proper time.
- Provide high quality screening units to have up to date diagnostic and treatment service to be accessible to and cover the needs of the the target population
- Encourage the use of Media (Radio, TV, Newspapers, SMS) and religious advisors to improve culture and awareness on Breast Cancer

Conclusion

- The Middle East is a very difficult ground to establish screening Programs
- Even in Countries like Egypt, where there is total government support, there is cultural resistance with diagnosed women not accepting treatment.
- There must be a more active role for the media and religious advisors

Cairo by night

Thank you