Customized Evidence Based Community Interventions: Impact Evaluation on Behavior Change for Breast Cancer Early Detection
Table of Content

- Introduction Around the Jordan Breast Cancer Program.
- The Home-Visits Project in a Social Marketing Perspective.
- Behavioral Objective and Target Group of The Home visits Project.
- Competition Analysis.
- Systematic Planning and the Intervention Mix.
- Results.
Introduction to the Jordan Breast Cancer Program
Over the Past Years Breast Cancer Continues to Grow on Yearly Basis

No. Cases


455 466 478 513 551 566 503 551 646 674 749 817 855 926 941 935

No. Cases
Breast Cancer is the Most Common Cancer Among Jordanians (Males & Females)

Ten most common cancers among Jordanians (both genders) 2013

- Breast: 20.4%
- Colorectal: 11.9%
- Lung: 7.70%
- Lymphoma: 7.20%
- Leukemia: 5.30%
- Urinary Bladder: 4.30%
- Stomach: 3.60%
- Prostate: 3.50%
- Brain & CNS: 3.30%
- Thyroid: 3.20%

Ten most common cancers among Jordanian Females, 2013

- Breast: 37.7%
- Colo-rectal: 10.5%
- Thyroid: 4.70%
- Corpus Uteri: 5.50%
- NHL: 4.60%
- Leukemia: 4.00%
- Ovary: 3.60%
- Stomach: 3.10%
- Brain & CNS: 2.80%
- Lung: 2.50%
Breast Cancer Claims the Lives of Women at a Much Younger Age

% of Female Breast Cancer cases By Age-group during 2013

- 70+: 9.3%
- 60-69: 18.7%
- 50-59: 23.9%
- 40-49: 30.2%
- 20-39: 15.9%
- < 20: 0.1%

Stages of Breast Cancer in Jordan based on KHCC’s Experience before JBCP

- Stage 0: 0.50%
- Stage I: 12.90%
- Stage II: 23.70%
- Stage III: 56.20%
- Stage IV: 6.70%

Breast Cancer affects the lives of women at a much younger age.
JBCP’s Strategic Vision was Based on a Needs Analysis Study that Indicated Four Groups of Main Challenges to the Early Detection of Breast Cancer in Jordan

**Capacity Building**
- Lack of female technicians trained in mammography and recruited to serve the facilities
- Absence of training facilities (other than KHCC) in Jordan to accommodate for training of technicians and radiologists
- Incomprehensive academic curricula that do not mandate mammography as a required course for technicians
- Training manuals have not yet been implemented

**Mammography Services**
- Lack of availability and accessibility to screening services
- Unequal distribution of services across the Kingdom
- No asymptomatic screening policy; only referred symptomatic patients accepted
- Cumbersome regulations to screening

**Quality Assurance**
- Lack of protocols and standard operating policies and procedures (SOPs) to run the units
- No certification program to set the standards for the mammography units
- No monitoring and evaluation of performance of health providers regarding guidelines for breast screening

**Public Awareness**
- Negative attitudes towards subject of breast cancer (many females prefer not to know) added to cultural barriers & social taboos that extend beyond the female herself leading to fears of being ostracized by husband, family, or society
- Need for more individualized and one-on-one activities in order to change behavior that require large outreach efforts
- Lack of awareness, buy-in & action of key-informant & service providers supporting screening
For Each One of the Charters Agreed Upon Since Inception of JBCP, a Set of Projects Has Been Identified and Detailed....

- **Screening Services**
  - Accessibility, Availability, Usability and provision

- **Quality Assurance**
  - Guidelines and SOPs

- **Public Awareness and Health Education**
  - Outreach

- **Networking for Sustainability**
  - Fundraising

- **Data and Information for Policy Decisions**
  - Monitoring and Evaluation of JBCP activities

- **Infrastructure & Equipment**
  - Accreditation

- **Human resources & Capacity Building**
  - Training

- **Screening**
  - Mass awareness

- **Projects**
  - Screening

- **Advocacy**
  - Researches and Studies

- **National Database**
The Home-Visits Project in a Social Marketing Perspective.
Problem Statement

73% of Breast Cancer cases were diagnosed in late stages (Stage 3 & 4) in 2007.

Underlying Reasons for this Problem

- Lack of Awareness
- Lack of Quality Service Available
- De-prioritizing prophylactic screening in poor Areas
JBCP Shall implement a total of **6340 Home-visits**, in underprivileged areas, through 3 projects, involving:

- Al-Hussein Camp
- Al-Wehdat Camp
- Mafraq city

**Aiming to induce a change in women behaviours, specifically practicing early detection examinations**, regularly and as a prophylactic action,

Achieved by **increasing the uptake percentage of mammography from around 5% to 50%** between 2010 and 2014.
Target Audience

Primary Target Group

- Women, between 40 and 65 years of age in camps and poor areas.

Secondary Target Group

- Men above the age of 40 in targeted camps
Evidence of Citizen/Customer Orientation

Demographic Analysis took place prior to the implementation of projects, results reflected the following:

- Total population
- Gender analysis percentages
- Medical facilities covering targeted areas

Persona Elements analysis, showed:

- Poverty
- Ignorance toward the importance of early detection
- Overcrowded camps general tendencies of being very social in nature, governed by the area nature.
Evidence of Citizen/Customer Orientation

• **Qualitative Published Studies** took place, aiming to study obstacles hindering women from performing early detection examinations, and hindering men from influencing women towards adopting such behaviour.

Results indicated that Obstacles Hindering Women were:

• Prioritizing
• Fear
• Safety issues as main challenges affecting women

• Obstacles Hindering men from influencing their family members were:
• Social
• Economic
• Psychological Factors
Insight

• The insight was the **influence of personal relations** on intended behaviours, as women felt **important and taken care of**, when dealt with on a personal level.

• This insight was governed by the condensed nature of underprivileged areas, leading to the creation of the one to one home-visits counselling project free of charge to meet the special requirements of such areas.
Competition Analysis

**Competitors providing early detection screening examinations were:**
- Private Hospital
- Public Hospitals and Medical Centres

**Problems identified in competing service providers:**
- Private sector provide services of high prices
- Public sector mammogram units lack proper services in regards to quality of mammogram machines and manpower
Competition Analysis

JBCP Services were Distinguished by:

• Quality of machines and personnel.
• Upgraded breast imaging units, using quality control kits.
• Qualified staff through building the capacities of staff working in the breast imaging unit, including
  o Radiographers
  o Radiologists
  o Medical technologists
  o Bio-medical engineers
  o Physicist

• All the previously described JBCP services were provided free of charge for all 3 projects, resolving the problems of quality and price suffered by the targeted group and area.
Competition Analysis

JBCP Services were Distinguished by:

- **Building Capacities** of Radiographers, Radiologists, Medical Technologists, Biomedical Engineers and Physicist
- **Upgraded Breast Imaging Units**
- **Quality Control Kits**
- **Free of Charge Services**
## Integrated Intervention Mix

<table>
<thead>
<tr>
<th>Support</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free and accessible mammogram screening services.</td>
<td>One to One counseling home-visits project protocol.</td>
</tr>
<tr>
<td>Qualified medical and non-medical team (Community Health Workers, Radiographers, etc.)</td>
<td>Linking Home-visits to screening units through a referral system.</td>
</tr>
<tr>
<td></td>
<td>Mass awareness campaigns synchronized with the project.</td>
</tr>
<tr>
<td></td>
<td>Educational Toolkit.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inform</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home-visits counseling sessions.</td>
<td>Qualitative and quantitative studies – detecting baseline and impact.</td>
</tr>
<tr>
<td>Mass awareness campaigns (Outdoor billboards, Flyers, Posters).</td>
<td>Quality testing on machines and personnel (National Accreditation Project).</td>
</tr>
<tr>
<td>Media Campaign.</td>
<td></td>
</tr>
</tbody>
</table>
Integrated Intervention Mix

Support

Design

Inform

Control
## Systematic Planning

### Scoping
- Area mapping and persona analysis.

### Design
- Selection of implementing partner.
- Toolkit Development.
- Home visits awareness project and mammography services.

### Implementation
- Training of CHWs.
- Project Implementation pursued side with hospitals and CBOs.

### Monitoring & Evaluation
- Post home-visits evaluation.
- Data entry.
- Weekly mammography & screening rates.
Results

- **80 Tool kits** designed and produced
- **Referral System** and follow up protocol developed
- **4 Training Workshops** for 40 CHWs
- **40 CHWs** selected
- **6,340 home visits** conducted
- A total of **19,000 BC brochures** distributed
6340 Home-visit Performed

19000 women were reached

53%, 83% and 76% of referred women got screened from Wehdat, AlHussein Camp and AlMafraq City
Thank you!

Facebook: Jordan Breast Cancer Program

Twitter: @JBCPjordan

Website: www.JBCP.JO