Nizwa Healthy Lifestyle Project (NHLP)
A Health Promotion Experience from Oman

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Thanks To Dr. Huda Syabi
Introduction.
- National situation.
- Overview about NHLP

The Evaluation phase.
- Desk review.
- Qualitative.
- Quantitative

The results

Lessons learned:

Ways forward
World Health is in Transition

**Epidemiological:**
- Chronic diseases overriding infectious diseases, & double burden of diseases in many developing countries

**Nutritional:**
- Diets are rapidly changing, physical activity reduced

**Demographic:**
- Population ageing

**Globalization:**
- Increasing global influences
# Challenges to health in Oman

<table>
<thead>
<tr>
<th>National health survey 2000</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11%</td>
<td>Diabetes</td>
</tr>
<tr>
<td>33%</td>
<td>Hypertension</td>
</tr>
<tr>
<td>19.1%</td>
<td>Obesity</td>
</tr>
<tr>
<td>40.6%</td>
<td>hypercholesterolemia</td>
</tr>
<tr>
<td>17.7% (sur city 2006)</td>
<td>Physical activity</td>
</tr>
<tr>
<td>%14</td>
<td>Tobacco</td>
</tr>
</tbody>
</table>

Tobacco: 14%
what is NHLP?
**What is NHLP?**

NHLP is a Community based project for primary prevention of non-communicable diseases and promoting healthy lifestyle in Nizwa.
The main objectives of the project

• Map the emerging epidemics of NCDs and to analyze the social, economic, behavioral and political determinants of the disease.
• Reduce the exposure of individuals and populations to the preventable common risk factors.
• Strengthen health care services for people suffering from NCDs by ensuring their access to effective interventions
Willayat Nizwa (Oman)

- Location:
  In Ad Dakhliyah region
  about 175 Km from Muscat
- Population: 82,679
- Population settlement:
  about 120 villages
Project Milestones
Project Milestones

- 1997 Decree: Appointment of a local project committee
- 1999 Development of the strategic plan
- 2003 Baseline survey
- 2004 Appointment of a local project committee
- 2004 Implementation of interventions

Nizwa Governor expresses the willingness of the community to host the pilot project.

Nizwa Healthy Lifestyle Project Evaluation
Prevalence Of Diabetes and Hypertension
Nizwa 2001

- Diabetes
  - Males: 9.5%
  - Females: 9.8%
  - Total: 9.7%

- Hypertension
  - Males: 16.2%
  - Females: 8.5%
  - Total: 12.1%

- Hypercholesterolemia
  - Males: 36%
  - Females: 34.6%
  - Total: 35.3%

Note: The data represents the prevalence of diabetes, hypertension, and hypercholesterolemia among males, females, and the total population in Nizwa, Oman, in 2001.
### Prevalence Of Obesity ,Physical Inactivity And Tobacco Use Nizwa 2001

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity</td>
<td>8.6%</td>
<td>17%</td>
<td>19.1%</td>
<td>National</td>
</tr>
<tr>
<td>overweight</td>
<td>30.9%</td>
<td>25.3%</td>
<td>28.4%</td>
<td>28.9%</td>
</tr>
<tr>
<td>physical Inactivity</td>
<td>48%</td>
<td>73%</td>
<td>60.5%</td>
<td>60.5%</td>
</tr>
<tr>
<td>Tobacco use</td>
<td>9.6%</td>
<td>9.6%</td>
<td>10.6%</td>
<td>10.6%</td>
</tr>
</tbody>
</table>

**Tuesday, May 26, 2015**

*Nizwa Healthy Lifestyle Project Evaluation*
Promotion of Physical activity

Healthy Diet

Tobacco prevention

RTA and domestic accidents control

Nizwa Healthy Lifestyle Project Evaluation

Tuesday, May 26, 2015
The Plan of Action
Approaches

- Population approach
- High-Risk Approach
Population approach
First : School Programs
✓ project friendly schools
✓ move for health
✓ Tobacco prevention
✓ Brown bread
Second: Community Empowerment

- Supportive environment
  - Gymnasium at Omani women association
  - Walking pathways
  - Availability of healthy food alternatives
  - Healthy restaurants competition

- Increase community awareness
High-Risk Approach

- Lifestyle Clinic
  - Weight Management
  - Tobacco Cessation

- Capacity building of health care providers

Nizwa Healthy Lifestyle Project
Tobacco Cessation Pilot Clinic

Tuesday, May 26, 2015
Figure 12: Status of implementation of activities from the strategic plan
Evaluation process (Feb2009-Aug2010)
The Objectives of evaluation

• To appraise the NHLP/CBI structures, project management
• To assess the political commitment and partnership in implementing the NHLP
• To assess community engagement in the process of project strategic action plan
• To analyze the NHLP implementation processes and progress against planned actions and interventions
• To assess the changes in healthy lifestyles (KAP)
• To identify good lessons and practices, strengths, threats and opportunities to guide the way forward
Methodology:

• Desk review
• Qualitative study
• Quantitative study
Stage one: Desk review (February – August 2009)

Contents

• Demographic characteristics
• Baseline Health and risk factors indicators
• Organizational Structures
• Project interventions and outputs
• Partnerships and Community participation
• Research and Studies
### Stage Three: the quantitative study (3rd July - 11th August 2010)

<table>
<thead>
<tr>
<th>Study Targeted</th>
<th>Omani population who are 20 years or above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampling</td>
<td>Multistage cluster</td>
</tr>
<tr>
<td>Sample Size</td>
<td>2100</td>
</tr>
<tr>
<td>Methodology</td>
<td>Combining the adapted StepWise and the baseline survey</td>
</tr>
<tr>
<td>Training</td>
<td>22 selected surveyors were trained</td>
</tr>
<tr>
<td>Pilot Study</td>
<td>50 clients from outside study sample</td>
</tr>
<tr>
<td>Response Rate</td>
<td>95.1% (total of 1997)</td>
</tr>
</tbody>
</table>
## Stage Two: The Qualitative Study
(24\textsuperscript{th} October - 11\textsuperscript{th} November 2009)

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGD</td>
<td>Total: 166</td>
</tr>
<tr>
<td>Interviews</td>
<td>16</td>
</tr>
<tr>
<td>Age Range</td>
<td>from 10-50</td>
</tr>
<tr>
<td></td>
<td>67 women</td>
</tr>
<tr>
<td></td>
<td>81 men</td>
</tr>
<tr>
<td></td>
<td>20 boys</td>
</tr>
<tr>
<td></td>
<td>23 girls</td>
</tr>
<tr>
<td>FGD</td>
<td>students, teachers, Jawala (Rovers), Nizwa sports groups, Health care providers, members from Private sector, NHLP committees, Women groups and other community</td>
</tr>
<tr>
<td>In-depth interviews</td>
<td>The Wali, key program managers, policy and decision makers, health care providers, academia and key community members.</td>
</tr>
</tbody>
</table>
The Findings
Topics for Discussion

• Community perception and participation with NHLP
• The effect on changing into HP environment.
• The Change In KAP and Health Status.
• Lessons learned.
• Ways forward.
Community Perception and Participation With NHLP
Most of the people recognized that NHLP is an awareness raising project to improve the behaviors of people in relation to NCDs.

Few knew about the interventions regarding the traffic and domestic accident prevention.

Most people recognize it as a Ministry of Health project which is directed to the community.
The project responded to the community needs, as the intervention area e.g. (smoking, physical inactivity, diet) are of community beliefs to be addressed.

It had influenced positively some of the social norms such as women participation in using the walk paths (65.5% of women are physically active).
General knowledge of survey population about Major Health Problem,

- Communicable diseases: 0.01 year 2001, 0.03 year 2010
- Psychiatric diseases: 0.02 year 2001, 0.06 year 2010
- D.k: 0.04 year 2001, 0.24 year 2010
- Non-communicable diseases: 0.92 year 2001, 0.67 year 2010
- Others: 0.01 year 2001, 0.01 year 2010
Participants believed that the project had succeeded in installing new ideas and objectives within the institutions and community members.

Most people participated actively in the project activities....Some felt that they are only involved in the execution.

Study participants mentioned that “Women Participation” was obvious and active (at higher level) (30% of committee members)
The Effect On Changing Into HP Supporting Environment.
The Effect On Changing Into HP Supporting Environment.

- The construction of the walk path and the indoor sports areas was considered as a direct effect of the NHLP.

- Impact of the NHLP on policy changes regarding the availability of healthy food at the schools (brown bread is now available as an option at the schools cantinas while selling chips was banned).

- Establishment of healthy lifestyle clinics.

- The demand for low fat items and brown bread was created in the community (83% availability in the market).
The Effect On Changing Into HP Supporting Environment.

- NHLP succeeded in creating inter-sectoral cooperation and building partnerships with different community and academic organizations.
- The project had an impact beyond Nizwa on the national level playing the role of a reference (Healthy cities /Healthy Villages).
Example Of Partnerships

University of Nizwa

Nizwa Club Rovers
The Change In KAP and Health Status
The Change In Knowledge And Attitude
Exposure to educational

Figure (10): Different Educational Materials And The Frequency Of Exposure To Them in 2010 Survey.
Diet

It is important to eat fruits and vegetables daily.

It is important to avoid regular oily food.

Fibre rich food is important for health.

Meat is more important than vegetables and fruits.

It is important to eat fruits and vegetables daily.

Year 2001 Year 2010

- Meat is important than vegetables and fruits: 13, 26
- Fibre rich food is important for health: 71, 70
- It is important to avoid regular oily food: 94, 86
- It is important to eat fruits and vegetables daily: 99, 97

Nizwa Healthy Lifestyle Project Evaluation

Tuesday, May 26, 2015
Prevalence Of Survey Population Who Believes That Smoking Shisha Is Less Harmful Than Cigarettes

<table>
<thead>
<tr>
<th>Year</th>
<th>Yes</th>
<th>No</th>
<th>D.K</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2001</td>
<td>0</td>
<td>0</td>
<td>22.5%</td>
</tr>
</tbody>
</table>

For year 2010, 0% believe smoking shisha is less harmful than cigarettes. For year 2001, 66.2% believe smoking shisha is less harmful than cigarettes.
Change in practice
Figure (20): Percentage Of Respondents Who Changed Their Diet During The Last Year
Figure (21): Comparison Of Percentage Of Type Of Oil Used For Cooking Between 2001 And 2010
Tobacco Use

Figure (26): Percentage current smokers 2001 and 2010
Figure (23): comparison of physical activity during leisure time between 2001 and 2010
Risk Factors and Morbidity

- Obesity (BMI >29.9) 13% (2001) vs 24% (2010)
- Hypertension (>140/90) 19.1% (2001) vs 20.6% (2010)
- Diabetes (>7 mmole/l) 9.5% (2001) vs 9.2% (2010)
- High triglycerides (4.5 mmol/l) 1.1% (2001) vs 1.4% (2010)
- High LDL cholesterol (4.1 mmol/l) 11.7% (2001) vs 20.6% (2010)
- Low HDL cholesterol (0.9 mmol/l) 17.8% (2001) vs 33.4% (2010)
Lessons Learned
Lessons learned: The Evaluation Exercise.

- The evaluation needs to be an essential part of any health promoting strategic plan.
- The existence of a national evaluation system facilitates the process of evaluation.
- Adopting different evaluation methodologies increases the validity of the findings.
- Presence of a comprehensive documentary system facilitate easy evaluation process.
Lessons learned:

NHLP interventions

• To review and Integrate the successful interventions within the schools to ensure sustainability.

• To continue the capacity building.

• Revisit the concept of ownership of the project.

• Empower the project local committee with decision making representatives.

• Ensure sustainable source of resources from the various sectors.
Ways Forward
Ways Forward

• To perform further detailed analysis of the data.
• To disseminate the results
• To lay on the next strategic planning
• To plan to perform longitudinal study to assess the impact of the project.
Dissemination of the results
Putting the 2nd 5 year plan
Launching of the second 5 year plan
Signing more partnership

University of Nizwa

National association of the elderly friends

National Antitobacco society

Nizwa Women Association
Launching of a healthy traditional cook book
Summary

- The project has increased the knowledge of people about risk factors and how to adapt healthy lifestyles.
- Many factors have contributed to the success:
  - Political commitment
  - Partnerships
  - Readiness of the community
Summary

• Challenges include:
  – The centralization of decision making in the other partnering sectors
  – Limited local experience in community management at the beginning of the project
  – A high level of turnover of members of the committees
  – The absence of local media
  – Burden of interventions at schools
• Using multi method evaluation systems is necessary to show the case the public and decision makers (pre & post intervention).

• If the experience will transferred, all lessons learned should be taken into consideration.

• Establishment of an independent HP structure ensures sustainability of such projects.
With honor ... we present this experience and success stories to its owner !!!!!

The Community In Nizwa
| Welcome |

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