Kansas Department of Health and Environment: Physical Activity and Nutrition

Field Experience Report
by
Arlerta Ndlela
Acknowledgements

Special thanks for guiding my MPH field experience work to:

- My supervisory committee: Dr Sandy Procter, Dr Ric Rosenkranz and Dr Mark Haub
- Dr Carol Ann Holcomb
- Dr Anthony Randles, KDHE Physical Activity Nutrition Program
- Ms Paula Clayton, Director, Bureau of Health Promotion, KDHE
- Dr Michael Cates and Ms Barta Stevenson, MPH Program
Outline

• Introduction
• Rationale for Field Experience
• Field Experience Objectives & Expected learning outcomes
• Culminating Experience
• Reflections on MPH
Introduction

- Obesity currently affects about 35.7% of the U.S adult population.
- Obesogenic environments, ‘the sum of influences that the surroundings, opportunities or conditions of life have on promoting obesity in individuals or populations’ contribute the most to the onset of obesity.
• Complex interaction of the physical environment, economics, policy and sociocultural environments calls for the environmental changes to be led by policy and social change

• Make the healthy choice, the easiest choice!
Health Policy:

- decisions, plans and actions that are undertaken to achieve specific health care goals within a society.
- defines a vision for the future which helps in establishing targets and points of reference for the short and medium term.
- outlines priorities and expected roles of different groups
- builds consensus and informs people

WHO, 2013
Rationale for the Field Experience

Master of Public Health Nutrition requires the completion of field experience with the objective to:

- Provide a bridge between professional academic preparation and public health practice
- Apply knowledge, attitudes and skills learned in core course in an organizational setting that provides mentoring and supervision by a public health practitioner
Goals were:

• To learn the processes of identifying key issues and engaging appropriate stakeholders in the development of nutrition policy

• Gain experience in leading nutrition discussions that will engage stakeholders, including politicians, and draw them toward commitment to support legislature addressing nutrition interventions

• Learn to conduct research that guides and informs policy development

• Experience the actual environment of government procedures in the US government.
Kansas Department of Health and Environment (KDHE)

- Kansas Department of Health and Environment (KDHE)
  http://www.kdheks.gov/
- Bureau of Health Promotion

Mission: To promote healthy behaviors, policies and environmental changes that improve the quality of life and prevent chronic diseases, injury and premature death through the partnership with the people of Kansas
- Programs in the Bureau of Health Promotion
  - arthritis
  - cancer
  - diabetes
  - heart disease and stroke
  - health risk studies
  - injury prevention and disability
  - physical activity and nutrition
  - *Safe Kids Kansas* and
  - tobacco use prevention
Physical Activity and Nutrition Program

- Mission: To increase the number of Kansas residents who have knowledge, motivation, and opportunity to make lifestyle choices that promote healthy eating and increased physical activity through state level leadership and coordination that reaches into communities across the state.
Programs implemented by the PAN program:

- Senior Farmers Market Nutrition Program
- Capital City Wellness Project
- Capital Mid-Week Farmers Market
- Healthy Kansas Communities Toolkit
- Kansas Child Health Assessment and Monitoring Project
Completion of 240 hours working on:

- developing issue paper to help come up with recommendations for the prevention of obesity
- managing data for the Senior Farmers Market Nutrition Program (SFMNP)
- conducting an evaluation study of the SFMNP program
- implementing state nutrition programs and gaining overall experience of working on other projects within the state health department
Culminating Experiences

1. Development of issue paper on obesity prevention
   - KDHE obesity prevention plans in line with the federal government’s *Healthy People 2020* goals
   - The Governor’s Council on Fitness commissioned to create and facilitate a statewide obesity prevention plan
   - Issue paper process required literature review on evidence-based strategies conducted at state level for the prevention of obesity
2. Senior Farmers Market Nutrition Program (SFMNP)
   - a federally funded, state run program
   - provides low income seniors with coupons to purchase eligible foods (fruit, vegetables, honey, and fresh-cut herbs) at farmers markets, roadside stands and community supported agriculture programs
   - Eligibility: ≥ 60 years and income < $1722/month before taxes.
   - Checks redeemed at trained and certified farmer or vendor that sells eligible foods.
Data Management:

- involved updating the Excel database
- data (distributed checks) brought/mailed by vendors with check numbers on their reporting sheet entered then refiled.
- Month end, redeemed checks retrieved through Solutran, an electronic payment management system for the SFMNP program then updated Excel database, with the date of redemption and vendor site number where redeemed
3. Capitol Mid-Week Farmers Market

- Aim is to increase access to fresh, locally grown produce and increase physical activity
- Conducted every Wednesday, 7:30 am-12 Noon from May-October of each year
- Vendors sell eligible foods: fruit, vegetables, honey, and fresh-cut herbs
- PAN conducts nutrition education activities
4. Rapid Market Assessment of the Capitol Mid-week Farmers Market on 11 July 2012

- Objective - to evaluate effect of Capitol midweek market on local economy, as well as its mission to promote increased consumption of fruit and vegetables
- A tool with three low-cost components (attendance counts, dot survey, constructive comments and observations)
Methodology:
Dot Survey

- More effective in gathering data in market setting compared to interviews
- A set of developed questions with number of limited responses displayed on flip charts
- Participants asked to read questions and place one dot sticker under answer most appropriate / applicable
Questions:

- How much did you spend in the market today?
- Are you making your purchase independently or splitting the cost with others?
- Does the farmers market encourage you to increase your fruit and vegetable consumption?
- Has shopping at the farmers market caused you to shop in other local businesses?
- How often do you shop at the farmers market?
- Why do you shop at the farmers market?
Methodology:
Observational count

- Participants were counted as they entered the market at three entrances by three observers
- Counts conducted every 25 minutes after the hour for 10 minutes
- Counts conducted at: 8:25 am, 9:25 am, 10:25 am and 11:25 am
Capitol Midweek Farmers’ Market 2012 Layout with Stalls

Diagram is NOT drawn to scale.

- Counter location

10th Avenue

Harrison Street

Memorial Sidewalk to Capitol steps

Sidewalk

Jackson St.
Results:
Estimated consumer attendance

<table>
<thead>
<tr>
<th>Hour</th>
<th>Count</th>
<th>Estimate</th>
<th>Temp.  F °</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:25- 8:35am</td>
<td>41</td>
<td>246</td>
<td>72</td>
</tr>
<tr>
<td>9:25 - 9:35am</td>
<td>115</td>
<td>690</td>
<td>80</td>
</tr>
<tr>
<td>10:25-10:35am</td>
<td>127</td>
<td>762</td>
<td>82</td>
</tr>
<tr>
<td>11:25-11:35am</td>
<td>75</td>
<td>450</td>
<td>88</td>
</tr>
<tr>
<td>Total</td>
<td>358</td>
<td>2148</td>
<td>80.5</td>
</tr>
</tbody>
</table>
How much did you spend in the market today?

<table>
<thead>
<tr>
<th>Response</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0-5</td>
<td>32</td>
<td>25</td>
</tr>
<tr>
<td>$5-10</td>
<td>63</td>
<td>50</td>
</tr>
<tr>
<td>$10-15</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>$15-20</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>$20+</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>127</td>
<td></td>
</tr>
</tbody>
</table>

Mean customer expenditure = $8.21
Size of shopping party - Are you splitting costs with others?

<table>
<thead>
<tr>
<th>Response</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>90</td>
<td>71</td>
</tr>
<tr>
<td>2</td>
<td>26</td>
<td>21</td>
</tr>
<tr>
<td>3</td>
<td>11</td>
<td>8</td>
</tr>
</tbody>
</table>

N = 127  
Mean number/shopping party = 1.378
• Market sales estimate for July 11, 2012:
(Estimated Customer attendance/mean number per shopping party) * Mean customer Expenditure
(2148/1.378)*8.21 = $ 12,946.34
Does market encourage you to increase fruit and vegetable consumption?  n=124

- Yes: 110, 89%
- No: 14, 11%
Does shopping at the market make you shop in other local businesses?  n=127

- Yes: 37, 29%
- No: 90, 71%
Why do you shop at the farmers market?

<table>
<thead>
<tr>
<th>Responses</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh Produce</td>
<td>88</td>
<td>53</td>
</tr>
<tr>
<td>Price</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Convenience</td>
<td>23</td>
<td>15</td>
</tr>
<tr>
<td>Support local business</td>
<td>41</td>
<td>25</td>
</tr>
</tbody>
</table>

N=164
Conclusions

- The Capitol Mid-Week Farmers Market is fulfilling its mission to increase access of fresh local produce to the 35,000 downtown employees in Topeka.

- It cannot be concluded if the Market increases physical activity behaviors and would need to be further investigated.
Reflections on MPH program

Coursework

- Health Services Administration (HMD 720)
- Social and Behavioral Sciences (KIN 818)

Application to Field Experience

- US Health Care System
  - Structure
  - Values
- Public Health in the US
Reflections on MPH program

Coursework

- Biostatistics (STAT 701)
- Epidemiology (DMP 754)
- Nutrition epidemiology (HN 844)
- Colloq. Mass Communication: Risk Communication (MC 720)

Application to Field Experience

- Issue paper
- Literature review
- Critique of literature
- Rapid Market Analysis
Reflections on MPH program

- Learned role and process of engaging public, private, volunteer and enterprise stakeholders in public health programs
- Policy development and implementation through participation in these forums: Governor’s Council on Fitness, Sodium Reduction Committee and Capital City Wellness program
- Evaluation of a fruit and vegetable program
• Overall, the experience at KDHE enriched my understanding of the processes of policy development, advocacy for a cause and working as a team towards making structural environmental changes that will support the prevention and reduction of obesity in the state of Kansas.
References

- Swinburn B & Egger G. Preventive strategies against weight gain and obesity. Obesity reviews 2002; 3. 299-301
- Solutran. Services offered to Farmers’ Market and Sr. Farmers’ Market Programs. Available at: https://www.solutran.com/pdfs/FMNP_SFMNP_Services_rev.pdf
Thank You