Introduction

The purpose of this journal was to publish the work of undergraduates in the Community Health Education Program. This issue was limited to the work of students in Community Health Education 440-Program Development in Community Health Education, and it provides a brief account on the work of students who were usually collaborating in groups to promote or protect health through their newly acquired skills in community health education.

This journal was distributed during the summer of 2012 to all faculty in the Department of Health Education and Health Promotion and to all students who have declared their major to be Community Health Education. Like all journals, this journal was a benchmark in time. For the authors of the accounts on these pages, you will remember these projects as your early work and you will undoubtedly improve with each subsequent project in your practice of community health education.

For those who read these pages before or at the start of their own service learning in Community Health Education 440, you are encouraged to match and surpass the efforts recorded on these pages. Journals were never published to stop progress; instead journal articles present others with an invitation to contribute by building on what was written.

If you are a past author or someone preparing to write your contribution, I hope this submission process will "give you the bug" so that you will be motivated to publish your work, contribute to your profession, and thereby promote individual and population health.

Forward,

Robert Jecklin, M.P.H., Ph.D.
Editor-for-now

Technical Note: The titles on the Table of Contents are hyperlinked to the first page of each article; a Return to Table of Contents hyperlink is at the end of each article. Click on these with your mouse to activate the hyperlink and quickly navigate this journal.

About the cover: "A Simpler Time" is the name of the brass sculptures by Mike Martino. The figures are looking at the Mississippi river with anticipation from their perch in Riverside Park. We have a similar anticipation about the future careers of the candidates who wrote on these pages.
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Reader's Guide:

What should preprofessionals look for in these pages?

Robert Jecklin, M.P.H, Ph.D., Assistant Professor, Coordinator of Undergraduate Preceptorships, Department of Health Education and Health Promotion, University of Wisconsin-La Crosse

Abstract: Reader's Guide appears in each issue and suggests what preprofessionals should look for when they are reading the articles in this journal. This guide varies from one issue to another, while it is not intended to be a complete text on program development, the guide always emphasizes something important about the process of program development in community health education. This edition emphasizes the areas of responsibility recognized by the National Commission for Health Education Credentialing, Inc.

Key Words: Assessing Needs/Assets/Capacities, Planning, Implementing, Evaluating and Researching, Administering and Managing, Resource Person, Communicating and Advocating

Introduction

The National Commission for Health Education Credentialing, Inc. recognized seven areas of responsibility for Certified Health Education Specialist (CHES) and Master Certified Health Education Specialist (MCHES). Preprofessionals in an undergraduate program are encouraged to look for the seven areas of responsibility when they read the articles in this journal. Look for how the authors explained their work assessing, planning, implementing, researching-and-evaluating, communicating-and-advocating, and serving as a resource person.

Assessing

When you read an article, look for how the authors described their assessment work. Were any theories or models used to guide the authors assessment? Did the authors use existing sources of information or did they develop instruments to collect information? What kinds of information did the authors collect about needs, assets, or capacities? What was the population of interest for the authors? Did the authors define important terms?

How many people were in the population of interest and what were their demographic and social characteristics? What health concerns were identified? What kinds of rates were used to measure morbidity, disability, fertility, and/or mortality in the population of interest? What genetic, behavioral, and environmental factors were identified in the causation, mediation, and/or prevention of the health concern(s) in the population(s) of interest? What knowledge, skills, attitudes, and/or beliefs were assessed in the population?
Did the authors look for what fostered or hindered important learning? Did the authors describe the influence of existing resources and programs on the health concern(s)? Did the authors identify priority segments in the population? How did the authors summarize and prioritize needs based on assessment findings?

**Planning**

When you read an article, look for how the authors described their planning work. Who did they involve in making decisions about a plan to promote health? How were members of the population(s) being served involved in the planning decisions? Who and how were other stakeholders involved in planning decisions?

What goals, objectives, or other forms of direction were established through planning? What resources were identified as necessary for progress in the directions identified in the plan?

What strategies and interventions were described in the plan? How was the selection of strategies and interventions influenced by legal, ethical, and cultural considerations? What pilots were conducted to assess the viability of strategies and interventions? Did the plan describe a scope, sequence, and overall logic that was consistent with assessment findings and the results of pilot interventions and/or strategies?

**Implementing**

When you read an article, look for how the authors described their implementation work. As part of their implementation, did the authors write about collecting baseline data and then initiate implementation of their plan? Did they describe monitoring their plan and making modifications that were responsive to emergent conditions? Did implementation involve training others to assume important roles in implementation?

**Evaluating and Researching**

When you read an article, look for how the authors described their evaluation and research work. Did they describe a plan for evaluation or research? What instruments did they use to collect data? How did they analyze and interpret their data?

How did they explain their findings? What relevance did their findings have for future program efforts or further research? What conclusions were made and did the findings support those conclusions?

**Administering and Managing**

When you read an article, look for how the authors described their administrative and management work. What financial, personnel and other resources were managed and/or administered by the authors? How much time and how much money were required to do this program?

What actions did the authors perform to assure acceptance and support for the program? Did the authors describe collaboration with one or more community organizations?

**Communicating and Advocating**

When you read an article, look for how the authors described their communication and advocacy work. What marketing analysis and planning did the authors describe to assure sufficient participation and support for their program? Did their program include promoting the use of health care or other related services?
Did the authors advocate for changes to the physical or social environment?

What messages were important? What theories were used to understand populations of interest, tailor important messages, and select important channels for communication?

**Serving as a Resource Person**

When you read an article, look for how the authors discuss the use of health-related information to guide assessment, planning, implementation, evaluation, and managing resources. What sources of health information were used, and were those sources credible, current, and complete for the type of program being described in the article? In addition to providing health-related information to the public, how do the authors describe the sharing their health education expertise with other workers and professionals through consultation and training.

**Summary**

Become a critical reader of literature about health education practice and research. Read what was written and identify how the narrative describes different areas of responsibility in health education. Notice what appears to be missing and compose questions you would ask the authors. Take advantage of the author's experience and think about how you would do this differently based on the author's experience.

The following resources may be helpful.


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I. Freshman/Sophomore Years
A. General Education Requirements
B. Interdisciplinary Requirements

<table>
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<tr>
<th>Credits</th>
<th>Course #</th>
<th>Course Title</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>4</td>
<td>BIO 103/105</td>
<td>Introductory/General Biology</td>
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<tr>
<td>3</td>
<td>CHE 240</td>
<td>Community Health Education Foundations</td>
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<tr>
<td>4-5</td>
<td>CHM 100</td>
<td>Contemporary Chemistry (4 credits) Or CHM 103</td>
<td>General Chemistry I (5 credits) MTH 150 or concurrent enrollment or placement into MTH 151 or higher</td>
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<tr>
<td>3</td>
<td>HED 205</td>
<td>(F/S) Introduction to Health</td>
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<tr>
<td>3</td>
<td>HPR 105</td>
<td>Creating a Healthy, Active Lifestyle</td>
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<tr>
<td>4</td>
<td>MTH 145</td>
<td>Elementary Statistics</td>
<td></td>
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<td>4</td>
<td>MIC 130</td>
<td>Global Impact of Infectious Disease</td>
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<tr>
<td>3</td>
<td>ESS 205</td>
<td>Human Anatomy (or Bio 312)</td>
<td>BIO 103/105</td>
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<tr>
<td>3</td>
<td>ESS 206</td>
<td>Human Physiology (or Bio 313)</td>
<td>BIO 103/105</td>
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<tr>
<td>3</td>
<td>CST 365</td>
<td>Communication in Teams</td>
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<tr>
<td>3</td>
<td>Psychology/Sociology or other Social or Behavioral Science</td>
<td>Check Catalogue</td>
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*Grade of "C" or better required in the courses listed above

II. APPLY FOR ADMISSION TO COMMUNITY HEALTH EDUCATION PROGRAM
a. Please contact Department of Health Education and Health Promotion for details.
b. Must be admitted to CHE program in order to enroll in core courses.

III. AFTER ADMISSION TO THE COMMUNITY HEALTH EDUCATION PROGRAM

A. CORE COURSE SEQUENCE

<table>
<thead>
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<tr>
<td>3</td>
<td>CHE 340</td>
<td>Epidemiology &amp; Community Health Problems</td>
<td>HED 205, CHE 240; CHM 100/103; BIO 103/105</td>
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<tr>
<td>3</td>
<td>CHE 350</td>
<td>Biometry and Research Design</td>
<td>HED 205, CHE 240, MTH 145</td>
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<tr>
<td>3</td>
<td>HED 335</td>
<td>(F) Human Ecology &amp; Environmental Health</td>
<td>BIO 103/105; CHM 103*</td>
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<td>3</td>
<td>HED 345</td>
<td>(F) Mental and Emotional Health</td>
<td>HED 205</td>
</tr>
<tr>
<td>3</td>
<td>HED 437</td>
<td>(F) Theories of Health Behavior</td>
<td>HED 205, CHE 240</td>
</tr>
<tr>
<td>3</td>
<td>CHE 440</td>
<td>Program Development in CHE</td>
<td>HED 205, CHE 240, 340, 350</td>
</tr>
<tr>
<td>3</td>
<td>CHE 441</td>
<td>Human Disease Prevention &amp; Control</td>
<td>ESS 205 and 206 or BIO 312 and 313</td>
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<tr>
<td>3</td>
<td>HED 477</td>
<td>(F) Grantseeking in Health, Human Services,</td>
<td>HED 205, CHE 240, 340, 350</td>
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<td>and Education Professions</td>
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<tr>
<td>2</td>
<td>CHE 491</td>
<td>(F/SP) Senior Seminar in CHE</td>
<td>Final Semester on Campus, b/4 CHE 498</td>
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B. CONTENT COURSES

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<th>Course Title</th>
<th>Prerequisites</th>
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<tbody>
<tr>
<td>3</td>
<td>HED 320</td>
<td>(SP) The U.S. Health Care System</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>HED 425</td>
<td>(F) Violence and Injury Prevention</td>
<td>Junior Standing</td>
</tr>
<tr>
<td>3</td>
<td>HED 469</td>
<td>(SP) Drugs, Society, and Human Behavior</td>
<td>Junior Standing, BIO 103 or 105</td>
</tr>
<tr>
<td>3</td>
<td>HED 472</td>
<td>(SP) Sexual Health Promotion</td>
<td>Junior Standing, ESS 205 &amp; 206 or BIO 312 &amp; 313</td>
</tr>
<tr>
<td>3</td>
<td>HED 473</td>
<td>(SP) Health Aspects of Aging</td>
<td>Junior Standing, HED 205 and CHE 240*</td>
</tr>
<tr>
<td>3</td>
<td>HED 474</td>
<td>(SP) Nutrition Education</td>
<td>Junior Standing</td>
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</table>

C. Electives (6 credits total from HED, CHE, SHE, or Advisor Approved Courses Outside the Department)

<table>
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<th>Course #</th>
<th>Course Title</th>
<th>Prerequisites</th>
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<tr>
<td>3</td>
<td>HED 412</td>
<td>(SP) Women’s Health Issues</td>
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<tr>
<td>3</td>
<td>Elective</td>
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</table>

D. FINAL SEMESTER-Fall or Spring (15 credits)

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<th>Course Title</th>
<th>Prerequisites</th>
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</thead>
<tbody>
<tr>
<td>15</td>
<td>CHE 498</td>
<td>Preceptorship**</td>
<td>**2.75 MGPA &amp; CGPA; Apply for and receive recommendation from HED faculty, Successful Completion of ALL CHE/HED Requirements IA &amp; B; II A-C</td>
</tr>
</tbody>
</table>

TOTAL HEHP CREDITS: 20 (CHE core) + 30 (HEHP content) + 15 (CHE Preceptorship) + 6 (elective) = 71 credits
TOTAL GEN ED/INTERDISCIPLINARY CREDITS: 51 credits minimum

*See HEHP Dept., room 203 Mitchell, for override if you have not satisfied these course prerequisites.
Breast is Best

Heather Aderman, Janine Foggia, Angie Gerlach, Danielle Handrow all undergraduate Candidates in Community Health Education in the Department of Health Education and Health Promotion at the University of Wisconsin-La Crosse

Community Collaborator: Beth Padesky, Lactation Consultant, Family Birthplace Department at Mayo Clinic Health Care, La Crosse, WI E-mail: padesky.bethany@mayo.edu

("Peaceful parenting," 2011)

Abstract: Breastfeeding is one of the most important things that a mother does for her child. Breast milk not only contains antibodies and protects the child from many childhood illnesses and allergies, but it also helps the mother lose weight and promotes mother-child bonding. In looking at target populations, our options included worksites and employers, currently pregnant or prospective mothers, and staff at a local medical facility. After talking with several different sources, we determined that working with staff at Mayo Clinic in La Crosse, Wisconsin, would be most productive.

At Mayo Clinic, Lactation Consultant, Beth Padesky, expressed a need for new educational materials for her staff. She also discussed the need for more unbiased language in regards to breastfeeding vs. bottle feeding and a more effective way to communicate to women about the risks of formula feeding.

After creating a PowerPoint for her staff, as well as various educational materials, we predict the rates of breastfeeding will rise in La Crosse County and Mayo Clinic, especially when all the staff is joined and integrated in this effort. We also predict the portrayal of breastfeeding will be more positive and women will be more confident in their efforts.

Key Words: breastfeeding, bottle feeding, staff education, pregnancy, educational materials, language

Introduction

When considering the issue of breastfeeding, our group determined that there are many barriers that mothers face while trying to breastfeed, let alone continuing the process for the ideal time span of six months. After talking with the Women, Infants, and Children (WIC) Office at the County Health Department, as well as Alexandra Price (graduate student at UW-L), and Beth Padesky, Lactation Consultant at Franciscan Skemp Hospital, our group determined that there was a need for better communication between staff at Franciscan and mothers about breastfeeding.

Beth Padesky informed us of a new idea – they wanted to shift from promoting the benefits of breastfeeding because most mothers knew that it was the best option. Instead, she wanted to communicate the risks of bottle feeding. Even though mothers know that breastfeeding is very beneficial for the baby, they may still choose not to, thinking that formula feeding is a very
“close second” option. This is not the case, however, and our project was focused on creating materials that would communicate this important concept. After comparing the rates of breastfeeding nationally, statewide, and in La Crosse County, we found data that was much lower than hoped. It was our goal to assist the staff at Franciscan Skemp with this mission and project.

Literature Review

The researchers completed a literature review of peer-reviewed journals to further the knowledge of breastfeeding related to specific factors.

Mortality The researchers used Academic Search Complete to search for mortality of breast feeding. There was a time frame of 1990 to 2012 which resulted in 165 articles. Upon reading multiple articles it was determined that mortality did not occur during breast feeding.

Morbidity To search for any studies regarding morbidity associated with breastfeeding, the researchers used Academic Search Complete. The researchers used the terms “morbidity” and “breastfeeding” as well as the time frame of 1990-2012 which resulted in 194 articles. In the Morbidity and Mortality Weekly Report of August 5, 2011, the authors stated that breastfeeding for nine months will reduce a child’s odds of becoming overweight by more than 30%. Furthermore, when breastfeeding is discontinued early or the mom chooses to formula feed the risk for infectious illness in the child is increased (Perrine, 2007). Another article, Breastfeeding and Reported Morbidity During Infancy: Findings from the Southampton Women’s Survey, also discussed the fact that breastfeeding has been shown to lower the risk of infection, particularly respiratory, ear, and gastrointestinal infections (Fisk, 2011).

The researchers also used CINHAL Plus. The terms “morbidity” and “breastfeeding” were used as well as the time frame of 2000-2012 which resulted in 103 articles. In an article from the Asia Pacific Journal of Clinical Nutrition, the authors conducted in which exclusively breastfed infants, partially breastfed infants, and non-breastfed infants were compared. The authors found that exclusively breastfed infants did not experience diarrhea during the study period compared to the other infants. It was also found that exclusively breastfed infants experienced less respiratory tract infections (Agrasada, 2011).

The researcher used MEDLINE with the terms “breastfeeding” and “diarrhea” during the time frame of 1990-2011 which resulted in 613 articles. In an article from the Professional Publication of the Nursing Mothers’ Association of Australia, the authors found that infants who were breastfed were 50 times less likely to die from diarrheal illnesses such as dehydration (Gribble, 2011).

Disability The researchers conducted a search using the ERIC Database to search for an association between breastfeeding and disability. The key terms “breastfeeding” and “disability” were used. Twelve results were located, none of which contained relevant information. The Alt HealthWatch Database was searched using the key terms “breastfeeding” and “disability”. There were eight results, and one article talked about visually impaired women and their ability to breastfeed. The article stated that visually impaired women cannot watch other moms breastfeed or learn their baby’s proper latching position (Mojab, 1999). The article also stressed open and respectful communication with the mother in helping her effectively and efficiently breastfeed her baby. Disability/ability in regards to the infant is not associated with this concern. In other words, there is no risk to the infant in...
regards to disability depending on the mother’s choice to breastfeed or not.

**Fertility including Natality** To search for a relationship between breastfeeding and fertility the researchers used MEDLINE database through EBSCOhost to search. The key terms “fertility” and “breastfeeding” were used. With these key terms 389 articles were found with a time span of 1990-2012. Gribble, McGrath, MacLaine, and Lhotska stated that ovulation and menstruation is delayed in response to an alter in hormones. Hormones are altered due to the suckling stimulation of the baby. Breast feeding can provide pregnancy protection for about 98% of women if they have exclusively breastfed for six months. Pregnancy can be delayed from six months to almost two years (Gribble, 2011).

The researchers used CINAHL Plus database through EBSCOhost to search for fertility while breast feeding. The database showed 554 articles within the time span of 1972-2012. Houston also believed that breast feeding delayed ovulation. The authors stated that the suckling sensation raises prolactin and luteinising hormone levels that suppresses ovulation and menstruation. Based on a previous study there are three different factors that suppress ovulation. These include the frequency of breastfeeding (at least six times a day), duration of each breast feeding (at least 100-150 minutes per day) and feeding at night.

While these studies indicate that breastfeeding delayed ovulation and can prevent pregnancy, other forms of birth control should be used to ensure full protection. Breastfeeding does not completely guarantee that a woman cannot become pregnant.

**Social Consequences of This Health Concern**
The researchers used Academic Search Complete to search for the health care costs associated with breastfeeding. The terms “health care costs” and “breastfeeding” were used to find scholarly articles. Twelve articles fit this description. The American Psychological Association in the article “Breastfeeding Duration, Costs, and Benefits of Support Program for Low-Income Breastfeeding Women” in 2002, researchers studied 41 women and their infants to determine health care associations. Milligan, Frick, Spatz, and Bronner found that infants who were breastfed until at least 6 months utilized hospital services check-ups, sick visits, prescriptions, and ER visits less. Both groups of infants (breastfed and formula fed) utilized the immunizations of health care at the same occurrence.

**Genetic Determinants**
The researchers used Academic Search Complete to search for the role of genetics in regards to breastfeeding. The researchers used the terms “genetics” and “breastfeeding” in the search and the result dates ranged from 2005-2012. The results consisted of 173 articles. After reading the abstracts of the first fifteen articles it became apparent that out of the studies conducted there are no known genetic factors associated with breastfeeding or the results of a study could not be replicated and were therefore inconclusive.

**Physical Environments as Determinants**
The researchers used Academic Search Complete to search for the effect of physical environments on breastfeeding. The terms “environmental toxins” and “breastfeeding” were used in the search along with a timeline of 2000 to 2012. The search yielded one result. In *Contamination and Contagion: Environmental Toxins, HIV/AIDS, and the Problem of the Maternal Body* the contamination of breast milk is explored. The author makes the case that breast milk is not pure as HIV and other blood borne diseases along with environmental toxins have been shown in the data to exist in breast milk (Hausman, 2006).
**Behavioral Determinants of Infant Health**

| **Breastfeeding** | “Breastfeeding is the recommended method of infant feeding and provides infants with necessary nutrients and immune factors” (CDC, “Breastfeeding Recommendations,” 2009)  
|                  | “Not breastfeeding is associated with an increased risk of these diseases in offspring: acute otitis media, gastrointestinal infections, lower respiratory tract infections requiring hospitalization, asthma in young children, obesity in adolescence and later life, type 1 and 2 diabetes, childhood leukemia, sudden infant death syndrome (SIDS), necrotizing enterocolitis. Further, an increased risk of maternal type 2 diabetes and maternal breast and ovarian cancers are associated with not breastfeeding.” (APHA, 2007, par. 15) |
|                  | “Mothers who smoke are encouraged to quit, however, breast milk remains the ideal food for a baby even if the mother smokes. Although nicotine may be present in breast milk, adverse effects on the infant during breastfeeding have not been reported. AAP recognizes pregnancy and lactation as two ideal times to promote smoking cessation, but does not indicate that mothers who smoke should not breastfeed.” (CDC, 2010, par. 7) |
|                  | “(Breast) milk yield was significantly lower after drinking alcohol” (Mennella, Pepino, 2008, pg 1)  
|                  | “Doses as low as .3g/kg body weight (equivalent to 1.5 standard Australian drinks) have been reported to have an inhibitory effect with a subsequent decrease in milk intake by infants. Most often undetected, this decrease in intake with regular low-level alcohol consumption over an extended period of time could contribute to a significant decrease in milk intake and a resulting decline in infant body weight, growth and other vital developmental indices.” (Gigglia, Binnes, 2006, pg 109)  
|                  | “Ethanol is water-soluble and enters the breast milk by passive diffusion, reflecting maternal blood levels (or higher) within 30-60 minutes. The removal of alcohol from breast milk and blood are similar and the level of alcohol in breast milk will fall as blood alcohol levels fall because of retrograde diffusion of alcohol from the milk back into the bloodstream.” (Gigglia, Binnes, 2006, pg 114)  
|                  | “Based on the available evidence the authors suggest the prudent use of alcohol and strongly recommend that lactating mothers consume only one to two standard drinks after breastfeeding.” (Gigglia, Binnes, 2006, pg 114) |
Using Academic Search Complete the researchers used the terms “mercury” and “breastfeeding” to search for the effect of the physical environment on breastfeeding along with a timeline of 2000-2012. The search showed 22 results. From the Journal of Exposure Analysis and Epidemiology the article Effects of Breast Feeding on Neuropsychological Development in a Community with Methylmercury Exposure from Seafood examined the effects of high maternal consumption of pilot whale in the Faroe Islands, which may cause transfer of marine toxicants into breast milk thereby effecting neuropsychological development. The study concluded that for children with high prenatal exposure to mercury and potential exposure through breast milk, breastfeeding was not associated with neuropsychological deficits at age seven. The study also showed that breastfeeding appeared to not be as beneficial as reported previously by other researchers in non exposed populations (Jensen, 2005).

Social Environments as Determinants The researchers used ProQuest to search for social environments as determinants of breastfeeding. To search for articles, the researchers used the terms “breastfeeding” and “social”. One very interesting and recent (2011) article called “Spoiled Milk: An Experimental Examination of Bias Against Mothers Who Breastfeed” talked about the social biases of breastfeeding mothers and the sexualization of the breast. In the study, researchers found that breastfeeding women were perceived as warm, but less competent (Smith, Hawkinson, & Paull (2011). The researchers also found that women who were breastfeeding were less likely to be hired compared to other conditions (Smith, Hawkinson, & Paull, 2011).

The researchers used Academic Search Complete to search for the effect of social environments on breastfeeding. The terms “breastfeeding” and “workplace” were used in the search along with a timeline from 2000 to 2012. There were nineteen articles in the results. The Journal of Business and Psychology in the article The Effect of Knowledge Accumulation on Support for Workplace Accommodation discusses accommodating breastfeeding moms in the workplace. According to the article one third of women in the U.S. who are employed when they become pregnant return to work within 3 months after the child is born and two thirds of women return within six months. Most women after returning to work discontinue breastfeeding. The study conducted revealed that individuals who knew more about the benefits of breastfeeding were more supportive of accommodating breastfeeding in the workplace (Seijts, 2008)

Methods

Breastfeeding has been around since the beginning of human life and plays a vital role in providing infants with optimal nutrition. While there have been giant steps taken towards the promotion of breastfeeding and lactation support for women, the need is still great. In the United States, the national average in 2011 of women who had ever breastfed was 74.6% (CDC.gov, 2011). Only 35% of infants were being exclusively breastfed at three months and only 14.8% at six months (CDC.gov, 2011). In Wisconsin, 73.7% of infants have been breastfed for some period, 58.5% of infants were not exclusively breastfed at three months and 12.3% were exclusively breastfed or given breast milk for the first 6 months in 2007 (“National Survey of Children’s Health,” 2007). According to the Women, Infants, and Children (WIC) data, breastfeeding among mothers of low-income in La Crosse County has been either staying stable or even decreasing slightly. When these numbers are compared to the goals that have been set it is apparent that much work needs to be done to increase rates of breastfeeding not only across the U.S. but in La Crosse County, Wisconsin.
Healthy People 2020 has listed increasing the proportion of infants who are breastfed as an objective. In relation to this objective is the target goal of increasing the percentage of infants who are breastfed to 81.9% and to have 25.5% of infants exclusively breastfed at six months (“Maternal, Infant, and,” 2011). Along similar lines are the goals set by the WIC program for La Crosse County, Wisconsin. The 2010 goal for the WIC program was to have 75% of women breastfed at birth and 50% continue breastfeeding until the infant is six months old (co.la-crosse.wi.us, 2010). However, in 2010, only 64.9% of babies born to WIC mothers were breastfed initially, and only 25.3% of babies were still being breastfed at six months (co.la-crosse.wi.us, 2010).

Formula feeding has come to be seen as the norm and breastfeeding as the ideal which has contributed to nonideal breastfeeding rates. There are a variety of factors, such as environmental and behavioral ones, that contribute to this. Specific to the environment is the social environment. Women may not feel supported in their efforts to breastfeed or pump in public places which may deter them from breastfeeding. One specific environment that may make it hard for a mom to breastfeed is the workplace. One third of women in the U.S. who are employed when they become pregnant return to work within 3 months after the child is born and two thirds of women return within six months. Most women after returning to work discontinue breastfeeding (Seijts, 2008).

Although, new steps have been taken to ease the burden of the workplace. The Affordable Health Care and Patient Act now requires employers to provide mothers with a space to pump/breastfeed in the workplace. In addition, women need to feel supported in their breastfeeding efforts in order to help increase their self-efficacy, which is belief in themselves that they can in fact breastfeed.

The three populations segments that were chosen are the following: Staff at Franciscan Skemp Mayo Clinic Health System, pregnant mothers, and new mothers. The staff at Franciscan Skemp Mayo Clinic Health System was chosen due to their willingness to collaborate with us. In addition, Beth Padeksy, a lactation consultant indicated to us the need to explore the new breastfeeding education approach, the risks of formula feeding approach. Through this we thought it would be beneficial to develop material and resources to help equip the staff to be better able to implement this new approach. Pregnant mothers were chosen as when a woman is pregnant that is when she is most likely to decide whether or not to breastfeed. New mothers were chosen because while a mother may have made the decision to breastfeed she needs support, encouragement, and continued resources in order to help her meet the recommendation of exclusively breastfeeding for the first six months.

For our three population segments we planned many different activities. The lactation consultants, doctors and nurses at Franciscan Skemp Mayo Clinic Health System would have a staff meeting to discuss the new wording and communication. Educational material have been created to improve their communication with mothers about breastfeeding. At the end of the staff meeting the lactation consultants would get the chance to role play to practice the new communication style.

The second population segment we planned activities for were pregnant women. The women would attend a presentation put on by the lactation consultants from Franciscan Skemp Mayo Clinic Health System. The consultants would present information about the barriers and difficulties to breastfeeding the women may face while trying to breastfeed. The pregnant women would be asked to identify people what support systems they had in place to help them make the decision to breast or bottle feed. We
also planned for the lactation consultants to attend Lamaze classes to initiate the relationship between lactation consultant and pregnant mothers. The final activity for this population segment is an afternoon at the spa. The pregnant women would gather together strengthen social support, gain empowerment, and most importantly relax.

The final population segment we planned activities for were new mothers. The new mothers would attend an interactive presentation put on by the lactation consultants from Franciscan Skemp Mayo Clinic Health System. The presentation, similar to the presentation for pregnant women, will discuss the barriers and difficulties the women may experience during breastfeeding. The new mothers will also have the opportunity to share advice with each other. We also planned for the lactation consultants to talk amongst the mothers of children in local day care facilities about their breastfeeding efforts with the hopes to increase the support between mothers and day care providers. The final activity for this population segment is a night out for the mothers. The new mothers would spend a nice dinner out with provided childcare. We planned this night out in hopes to increase social support and empowerment amongst the new mothers.

**Evaluation**

We planned to take attendance at the large group staff informational meeting. We believe the program to be effective if 90 percent of the staff members attended. We plan to have Beth Pedesky and other supervisors evaluate role playing between lactation consultants. The role playing would demonstrate that the consultants understood and were able to communicate the new material. The final evaluation method would be a post-birthing experience phone call. The consultants would follow-up with new mothers about their hospital stay breastfeeding experience.

The pregnant women will receive in-person surveys after the interactive presentation. The anonymous surveys will be compiled and analyzed for things to change in future presentations. Attendance and surveys will be collected at the baby and me spa day to determine the effectiveness of this activity. We determined the program to be effective if forty expectant moms attend. In-person surveys will be distributed to the participants of the Lamaze classes to find what should be improved in later activities.

The new mothers attending the new mothers support groups, day care presentations, and mom’s night out will be evaluated through anonymous in-person surveys. The new mothers support group will be evaluated every three months. We will consider the mom’s night out event to be effective if thirty-five new mothers attend. All surveys will be analyzed for corrections in future activities.

**Results**

We were able to complete the preliminary steps towards helping Franciscan Skemp Mayo Hospital integrate the new approach of the “Risks of Formula Feeding” into their daily practice. As a group, The first time we met with Beth Padesky to coordinate our breastfeeding promotion efforts, she provided us with guidance that would best help the hospital’s educational efforts. We came to a conclusion this would be done in the form of researching, finding more evidence and creating relevant resources.

We were able to accomplish all three. We found sound research articles and evidence about the risks of formula feeding and the effectiveness of using this viewpoint to promote breastfeeding. We were unable to find many research articles that addressed this education tactic effectiveness, but this proves there is a need for research in this area without the influence of
formula companies. We provided Beth Padesky with our research in the form of a list/annotated bibliography, suggestion word usage/synonyms for “risk” and “benefit.” A detailed list of ideas with examples, an education brochure, and a staff PowerPoint presentation.

Beth Padesky plans to use the staff PowerPoint presentation with the staff in Franciscan Skemp Mayo Family Birthplace Unit as well as share the detailed ideas and word choice list. At the end of the PowerPoint, there is an interactive role playing activity for staff. This aligns with the evaluation design we created; this will not be done for a couple more weeks so we are unaware of these results. After the staff have had sufficient time to overlook the new education tactic and specific materials, they will further the process of integrating this viewpoint by receiving the permission from Mayo Rochester and working with Mayo’s marketing department for the finished product to adhere to their system wide standards.

Discussion

If we were to have more time we would have the Beth Pedesky and the lactation consultants implement the activities we had planned. As previously mentioned, we created the presentation material and additional resources for Beth. Beth needs to have our material approved by Franciscan Skemp Mayo Clinic Health System before she can present the information to her lactation consultants.

Additional research needs to be completed to determine if the risk approach is effective in promoting breastfeeding efforts. Further research will allow the health professionals understanding we will be better at communicating with future patients or clients.

References


Breastfeeding recommendations. (October 2009). Center for Disease Control.


Frequently asked questions. (April 19, 2010). Center for Disease Control.


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Community Health Education
Admission to the Undergraduate Program

1. **Know yourself and your interests.**
   A career in Community Health Education is not for everyone, but almost everyone can find interesting knowledge and experience in this major.

2. **Make a decision.**
   If you want to major in Community Health Education, contact the advising assistants to the Dean in the College of Science and Health to declare your major as Community Health Education. Once you declare, you will be assigned an advisor and you will receive important information about the major.

3. **Follow through on your commitment.**
   Do your best in all classes to assure that you have a high grade point (2.75 is required for admission, and higher grade points are required by most graduate programs). Prioritize successfully ("C" or better) completing all interdisciplinary requirements. You may take Content Courses before completing your interdisciplinary requirements, but Core Courses are reserved for those who are admitted to the major when they successfully completed all interdisciplinary requirements with an overall UWL cumulative grade point of 2.5 or higher. Interdisciplinary requirements and Core Courses are detailed on the Advising Sheet which appears in this manual.

4. **Develop your interests.**
   Be aware that your interests may change and you should reflect on this as you start to think about "where you want your education to take you". If you are interested in graduate or professional schools, what will best prepare you for those challenges? If you are focused on work, what health concerns interest you most? What populations do you want to serve? What coursework or minors will help you be successful? See your advisor, talk to other faculty and other knowledgeable persons, volunteer, and do unassigned reading about your interests.

5. **Bridge to work and continuing education.**
   Align yourself with a preceptorship that is consistent with your interests.
Desk to 5K: A Running/Walking Program for Gundersen Lutheran Employees Through the Community and Preventive Care Services Department

Hanna Conway, Grace Lind, Nichelle Roessler, Jeffery Steele
Undergraduate Candidates in Community Health Education at the University of Wisconsin-La Crosse

Abstract: This Desk to 5K program was designed to assist Gundersen Lutheran employees in training for a 5K walk or run of their choice. The program provided multiple avenues for participants to engage in our program and better their health habits. The program was available to all Gundersen Lutheran employees and program materials were distributed through email. Surveys were distributed to participants so we could better understand the population and their needs.

Key Terms: Comprehensive health program: Comprehensive approaches can take several forms, including (i) integrating worksite health promotion, occupational health and safety and health care and disease management programs [1–6], (ii) targeting health behaviors with interventions operating at multiple levels of influence [7–11] and (iii) addressing multiple determinants of workplace health, including work conditions and related stressors [12–16] (Weiner, Lewis & Linnan, 2009). Physical inactivity: less than 10 minutes total per week of moderate or vigorous-intensity lifestyle activities. Insufficient physical activity: doing more than 10 minutes total per week of moderate or vigorous-intensity lifestyle activities, but less than the recommended level of activity. Recommended physical activity: reported moderate-intensity activities in a usual week for at least 30 minutes per day, at least 5 days per week; or vigorous-intensity activities in a usual week for at least 20 minutes per day, at least 3 days per week or both.

Introduction

Worldwide there has been a large shift towards less physically demanding work (World Health Organization, 2011). This has been followed by the increased use of mechanized transportation, a greater prevalence of automated technology in the workplace, and a society largely connected to electronic devices (World Health Organization, 2011). All of these factors contribute, largely, to a rise in sedentary lifestyles. A sedentary lifestyle is a medical term used to denote a type of lifestyle with no or irregular physical activity.

At least 31% of the world's population does not get sufficient exercise (World Health Organization, 2011). Globally, this lack of adequate exercise is contributing to the rising rate of chronic diseases such as obesity, heart disease, stroke, and high cholesterol (CDC, 2010). As populations continue to move into cities, population overcrowding, lack of parks and recreational facilities, and high-density traffic lead to a less active lifestyle (CDC,
A number of factors have been associated with physical inactivity at a global level including being female, older age, living with a partner, smoking cigarettes, lack of education, and poverty (Hallal, 2005).

Americans have become less physically active within the past 50 years (World Health Organization, 2011). This is largely due to a decrease in work-related activity. During 2000 and 2005, “the number of adults who were never physically active increased from 9.4% to 10.3%, while the number who were engaged in the highest level of physical activity decreased from 18.7% to 16.7% (Brownson, 2005). In 2000, the CDC estimated that “more than 40% of the US population was sedentary, another 30% was active but not sufficiently and less than 30% had an adequate level of physical activity” (CDC, 2010).

On a more local level, similar trends exist throughout Wisconsin. According to the Wisconsin Heart Disease and Stroke Prevention Program, over half of Wisconsin residents (56%) are living with at least one chronic illness due to a sedentary lifestyle. In fact, seven of the ten leading causes of death in Wisconsin are due to preventable chronic diseases - accounting for approximately 2 out of every 3 deaths annually. One out of five Wisconsin residents did not exercise in the past month (Wisconsin Department of Health Services, 2011).

La Crosse, Wisconsin is certainly no exception to this trend. According to the Wisconsin Department of Health Service’s La Crosse County Public Health Profile, 166 people died from heart disease, 190 from cancer, and 19 from diabetes in 2009 alone (Wisconsin Department of Health Services, 2009).

An article from The American Journal of Health Promotion stated that there were many different barriers for an employee to participate in a worksite wellness program. Some of these barriers would be: no time before or after work, no time at work, too tired, already being involved in other programs, and not wanting to participate in programs with their co-workers. As health educators and program planners we need to try to evaluate the population we are providing a program for so we can properly overcome the barriers that would inhibit an employee from participating in a worksite health promotion program.

The population that we believe would benefit from our program would be adults of working age. There is a wide age range of people that health promotion can benefit. Overall, working adults have busy schedules and health may not be a priority. Worksite wellness programs can increase the awareness of individuals to health issues and what they can do to better their health for a healthy future.

Research has shown that there are many benefits to instilling a worksite wellness program. Some of these benefits include cost containment, reduced absenteeism, higher productivity, reduced injuries, decline in worker’s compensation and disability, increased employee morale, loyalty and sense of self responsibility (Ickes & Sharma, 2009). These benefits can be seen by the employer, employee, and the surrounding community as well. Overall, employees viewed wellness programs positively, and as an indication of the employer’s commitment to their well-being (Young, 2006).

In addition to helping employees sustain healthier habits, worksite wellness programs also aid in reducing stress, which can also be referred to as “the silent killer.” With the reduction of stress, employees also become more satisfied with their jobs, increase their productivity, and have better attitudes overall. Participants of a worksite wellness program also tend to develop better relationships with their fellow employees. The participants provide social support for each other which is often needed for health behavior change. The workplace is an ideal setting to address health
issues and promote healthier lifestyles, because there is social support and it is a controlled environment.

Worksite wellness programs can be implemented in many different work settings such as industries, hospitals, and many other work sites. An effective use of worksite programs can reduce health risks and overall, improve the quality of life for workers. Common worksite wellness programs would be weight-loss incentives, smoking cessation programs, physical activity programs, nutritional education programs, prenatal education programs, and stress reduction programs. The CDC and United States Bureau of Labor Statistics state employers have abundant opportunities to promote employees’ health and foster a healthy work environment for the 139 million workers in the United States. Worksite wellness programs can do such by positively impacting employees’ health and lowering their risk for chronic disease. Worksite wellness programs are the key to improve workers’ health status. Not only can a worksite wellness program be beneficial to an individual worker but also for the company or organization as well.

**Methods**

We intended to lower the chronic disease rates within our priority populations through our “Desk to 5K” program. As we were deciding on three priority populations, we found ourselves leaning towards population segments that were based upon participation length and participation level. We chose three priority populations to be: early drop-outs, late drop-outs, and not maintaining. For all three populations we sent out a pre-survey to assess where the participants were starting out, along with a post-survey after the program has finished. We intended to send out a mid-program survey to participants, however due to miscommunication with our collaborator, Gundersen Lutheran, the survey was never sent to the participants. We also planned group runs with the participants, lead by two of our group members at a time. These runs were held on Saturday mornings at Riverside Park in La Crosse. We wanted to utilize local trails and paths to encourage physical activity to our participants. As a group, we also sent out weekly tips via email that gave motivation and encouragement to our participants. “Check-in” emails were also sent out to those participants who indicated they were interested in these reminders through our pre-survey.

There are a number of reasons why our priority populations lead a sedentary lifestyle. One factor to consider is genetics. Obesity and being overweight can be connected to genetics; however, lifestyle changes can override one’s genetic predisposition. Moreover, workplace and physical environmental change occurs when there is access to healthier options for employees. Examples would be: healthier food in vending machines, walking trails close to the worksite, fitness facilities, and safe and welcoming stair wells. Workplace social connections increase quality of life. Co-workers have influence on others to participate in worksite programs. Within the hierarchy of job status and position, if manager or executive positions participate, other will be more apt to participate as well. This shows that the social environment plays a significant role in preventing obesity-related health concerns.

Early dropouts and late dropouts are both important to the health concern of physical activity that is being addressed through our “Desk to 5K” program. Many of the Gundersen Lutheran staff work full-time at a sedentary or low-physical demanding jobs. Addressing physical activity within this population is a necessity because Gundersen Lutheran is always striving itself to be one of “America’s Healthiest Companies.” Much of the participants are older adults who may have, or are at risk for, diabetes and have arthritis. Physical activity is especially important for these individuals because it will
lower their risks for developing diabetes, increase their muscle mass which will help treat arthritis, and aid in weight management.

Many of the participants, especially those emphasized in the early and late dropout category, may have limited accessibility to obtaining physical activity. It is important to address their accessibility to overcome their limitations. The early drop outs are from multiple shifts at Gundersen Lutheran and work about forty hours a week. Our group has demonstrated a variety of ways on how physical activity can be achieved in hopes that the participants will realize their accessibility is not as limited as they may have once believed. For example, participants can take walking breaks during their shift around the grounds of Gundersen Lutheran. Also, it is vital the early dropouts understand physical activity can be done at multiple locations and is not limited to a gym or one specific activity. Fortunately, Gundersen Lutheran has a gym offered to its employees in which they can utilize and have access to.

Participants who are not maintaining their physical activity are also an important priority population segment for our “Desk to 5K” program. Maintenance of physical activity is vital to the goal of our program and will significantly reduce the incidence of chronic diseases due to a sedentary lifestyle such as heart disease, cancer, and diabetes. According to the Wisconsin Department of Health Service’s La Crosse County Public Health Profile, 166 people died from heart disease, 190 from cancer, and 19 from diabetes in 2009 alone (Wisconsin Department of Health Services, 2009). Similar trends exist throughout Wisconsin; according to the Wisconsin Heart Disease and Stroke Prevention Program, over half of Wisconsin residents (56%) are living with at least one chronic illness due to a sedentary lifestyle. In fact, seven of the ten leading causes of death in Wisconsin are due to preventable chronic diseases - accounting for approximately 2 out of every 3 deaths annually. Therefore, the importance of this priority population segment in addressing our health concern should not be overlooked and is a vital component to the overall success of our program.

The participants of this program may have limited accessibility to obtaining physical activity for several factors. It is important to address their accessibility to overcome their limitations. The participants who are having trouble maintaining may have prior commitments to their work or family obligations keeping them from maintaining adequate physical activity. It is also important to stress to these participants that physical activity does not have to be done in a “formal setting” and one can maintain a healthy level of exercise simply by doing a few simple exercises at a desk at work or on a lunch break.

**Intervention Strategies**

For this program, the intervention was based on concepts of the Theory of Diffusion of Innovations for Adopters. The Diffusion of Innovation seeks to explain how innovations are immersed in a population. An innovation can be described as an idea, behavior, or object that is perceived as new by a population. Diffusion of Innovation focuses primarily on change about the evolution or “reinvention” of products and behaviors so they become better fits for the needs of individuals and groups. This theory focuses on how the innovations change rather than the individual. An aspect of this theory considered was the importance of peer-peer conversations and peer networks. We considered the importance of conversations and the influences peers have with one other, and what the participants’ risks and uncertainties may be in order to avoid dropout rates. It was essential we advertise the program and work with peer networks to increase the rate of involvement and avoid dropouts. The population
segments also needed sufficient amounts of support and design our program to maximize simplicity.

We based our three priority populations on levels of their participation and how likely they were to stick with the program. The three segments are early drop-outs, late drop-outs, and not maintaining. Breaking the population into these three groups enabled us to utilize the Theory of Diffusion of Innovations and easily target the program and the intervention activities to reduce the dropout rates and maintain physical activity among the participants.

The intervention activities were the same for all of our priority populations since we were unsure of what group the participants would be categorized into. Our intervention activities included a pretest, posttest, and a 3-month posttest survey, check-in emails, weekly tips and motivation quotes, planned group runs, and a packet of information for the participants. By providing an abundance of resources, support, and planned group activities, we hoped the participants would consider the benefits of maintaining a physically active lifestyle and continue to participate in the program.

The first intervention activity included in the “Desk to 5K” program was the informational packet. The packet contained a week-by-week training guide, one for walkers and one for beginning or intermediate runners, warm-up and cool down exercises, stretching techniques, and injury prevention information. We emailed all the participants the “Desk to 5K” packet about three days before the six week training began to familiarize the participants with the program and training they would be completing.

A pretest was distributed to the participants through email during the first week of the program. By implementing a pretest, we were encouraging the participants to think about their current physical activity practices, if any, and what their thoughts were regarding a group run. We also asked the participants basic demographic questions such as age and gender to gain somewhat of a better understanding on our participants and how we could further cater the activities to the participants. A posttest will be distributed through email after the “Desk to 5K” has ended which lasts a total of six weeks. Within the posttest, we will be asking the participants if the training we provided them prepared them for the 5k road race and if the weekly exercises were helpful to their training activity. We will also be asking them if they believe the motivational quotes and tips were helpful and prepared them for the training and their race. To address the not maintaining population, we will ask the participants how likely they are in continuing to engage in regular physical activity and if they would consider completing another 5K race and training program. A 3-month posttest will also be emailed to the participants to determine if the participants are maintaining recommended levels of physical activity.

The “Desk to 5K” program included weekly group runs every Saturday morning during the last four weeks of the program. We wanted to focus heavily on social support peer networks so we created group runs as a chance to meet and converse with the participants and form a relationship with them as well.

A check-in email was sent through email to potential early dropouts and late dropouts populations. The check-in email provided information on why we created the program, asked how training was going, and included information on future group runs.

Each week, training, running, and racing tips, as well as motivational quotes were sent out the participants. The tips were created to encourage the participants and prepare the participants to continue the training. The tips were provided to the participants for educational purposes since many of the participants most likely had not trained for a road race before. The motivational quotes were provided weekly through email,
encouraging them to continue with their training.

**Evaluation Design**

To evaluate the “Desk to 5k” program, an experimental design with a pretest, posttest, and 3-month posttest was used. Prior to program implementation, each participant was emailed a pre-program survey through their Gundersen Lutheran email account. This survey was used to gain basic information on the participants which enabled us to better cater the program to meet their needs. The survey also collected information on the participants’ interest in group runs and what times would be best to hold the runs. The last component of the pre-program survey was an awareness portion for the participants as well as a way for us to measure change in the participants’ physical activity levels. The participants were asked their current level of physical activity and what forms of physical activity they participate in.

The post-program survey will be distributed to the participants through email once the final week of the “Desk to 5K” program is complete. This survey will evaluate the participants’ perceived effectiveness of the program and if they found all the activities to be helpful with their training. In order for us to evaluate the effectiveness of our objectives within the program, we will be asking the participants how willing they are to continue exercising with the program now completed and how likely they are to enroll in another run or walk road race.

Three months after the program has been completed, another post-program survey will be distributed to the participants. This will help us be able to evaluate whether the participants remained adequate levels of physical activity set forth by the Centers for Disease Control and Prevention (Physical activity for everyone, 2011). We will also be asking the participants if they have enrolled or completed a run or walk road race since the program has ended. We will also be addressing the participants’ perceived benefits of engaging in physical activity by asking them what benefits they have noticed.

**Results**

Developing and working with our 6 week “Desk-to-5k” program, the availability to conduct, complete, and receive final results was challenging and unfortunately unsuccessful. With only a few weeks to administer a full program, errors occurred such as miscommunication with program collaborators. The only survey we received results from was the pre-survey. The tables included in this results section reflect the results we received from the pre-survey. Table1 states that more women than men participated in the program, Table2 states that, on average, more people engage in moderate to vigorous forms of exercise 2-3 times per week, Table 3 shows that the majority of participants have never completed a 5k race before, and Table 4 reflects if the participants were interested in receiving a “check-in” phone call or email throughout the six week program.

Also through miscommunication with program collaborators, our mid-surveys were never distributed to our participants. Due to the timing of our program, we were unable to receive results from the post-surveys. The program officially ends on Saturday, May 5th, so we could not send our post-survey out prior to that date.
Pre-Survey Results

Table 1

**Gender of "Desk to 5k" Participants**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>30</td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 2

**How many days a week do you participate in moderate or vigorous activity?**

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1 times</td>
<td>2</td>
</tr>
<tr>
<td>2-3 times</td>
<td>14</td>
</tr>
<tr>
<td>4-5 times</td>
<td>10</td>
</tr>
<tr>
<td>6-7 times</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 3

Have you participated in a 5k (3.1 miles) event before? (check all that apply)

Yes, I have completed a 5K run: 12
Yes, I have completed a 5k walk: 14
No, I have not completed a 5k event before: 16

Table 4

As part of the training program, would you be interested in receiving a "check in" phone call or email to talk about your progress, ask questions, get additional resources, etc?

Yes: 20
No: 15
**Discussion**

If additional time and resources were available, we feel that our program would have been more successful. We propose if we were to have auxiliary amount of time to complete this program, it would have been more effective not only to us and our program collaborators, but also to the participants. Additional time and resources would have allowed us to develop more in-depth relationships with our participants and would have enabled us to reflect on direct feedback from participants on how they felt about the structure of program. Also, if we had the ability to be on-site at Gundersen Lutheran, we would have had more face-to-face communication with our participants and program collaborators. Having this face-to-face contact would have decreased the amount of miscommunication errors when questions, suggestions, or other concerns arose during the development and implementation of the program.

Therefore for future reference, if additional time and resources were given, we feel our “Desk to 5K” program would be more successful. Face-to-face communication with our collaborators and participants would have created a stronger understanding of the program structure and enhanced the success rates of the Gundersen Lutheran employees who participated in our “Desk to 5K” program.

**References**


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MISSION OF ESG

The mission of the honorary is promotion of the discipline by elevating the standards, ideals, competence and ethics of professionally prepared men and women in Health Education.

GOALS

The goals of the honorary include:

• Supporting the planning, implementation and evaluation of health education programs and resources
• Stimulating and disseminating scientific research;
• Motivating and providing health education services
• Recognizing academic achievement
• Supporting health education advocacy initiatives
• Promoting professional standards and ethics
• Promoting networking activities among health educators and related professionals

To learn more about joining the Eta Sigma Gamma chapter at University of Wisconsin-La Crosse, you may contact a student member or Drs. Rees or Caravella in the Department of Health Education and Health Promotion.
“Eat to Live”

A Preconception Health Guide Program

Alecia Luedke, Jacqueline Deviley, Christi Beilfuss, and Jessa Van Every all undergraduate candidates in Community Health Education at the University of Wisconsin- La Crosse.

Abstract: The “Eat to Live” program is a guide to preconception health for women of reproductive age who attend college in La Crosse, WI. The program was open to the three college campuses located in La Crosse, WI: University of Wisconsin-La Crosse, Viterbo, and Western Technical College. Since more than half of pregnancies today are unplanned, it is important for women to create a healthy lifestyle before pregnancy occurs. The “Eat to Live” program featured a presentation and food demonstrations. Also, informational brochures and recipe books were handed out featuring healthy recipes and healthy substitutes. Also, a take-home self-assessment and a physician-guided health assessment were handed out to be used as a self-awareness tool and reinforcement method. Pre and post assessments were used to assess the knowledge the participants gained from the program. Also, in collaboration with the Wellness Resource Center at UW-L, a “Stall-Seat Journal” was created and featured in 245 dormitory restrooms in order to promote the program and increase the health of freshman and sophomore college students.

Key Words: Preconception Health: Aims to promote the health of women of reproductive age before conception and thereby improve pregnancy-related outcomes (CDC). Prenatal: Before birth; during or relating to pregnancy (CDC). Birth Defects: A physical or biochemical abnormality that is present at birth and may be inherited or the result of environmental influence (CDC). Low Birth Weight: Babies born weighing less than 5 pounds, 8 ounces (2,500 grams) are considered low birth weight (Nutrition). Very Low Birth Weight: Weight less than 1,500 grams, or 3 pounds 4 ounces (Child Health USA). Neural Tube Defects: Neural Tube Defects are birth defects of the brain and spinal cord with the two most common being spina bifida and anencephaly (U.S. National Library of Medicine). Miscarriage: The spontaneous loss of a fetus before the 20th week of pregnancy (CDC). Premature birth: Babies born before 37 completed weeks of pregnancy are called premature (CDC).

Introduction:

Good health at birth is a fundamental determinant to a healthy life. The health of the mother plays a key role in determining the health of the child. Although many women do not give pregnancy much thought until they are ready to start having children, it is important for women to consider their health long before the days of conception. More than half of
pregnancies today are unplanned, which creates an even bigger concern for preconception health, since the first few weeks of conception are vital to fetal development. Preconception health aims to promote the health of women of reproductive age (15-44) before conception occurs and thereby improve pregnancy-related outcomes (Centers for Disease Control and Prevention, 2011).

Negative birth outcomes, such as infant mortality, miscarriage, premature birth, and low-birth weight determine a child’s current and future morbidity. “The rate of premature births in the United States has increased by 36 percent since the early 1980’s with about 12.8 percent of babies, more than half a million, being born prematurely every year” (Your Premature Baby, 2010). In 2010, 4,813 Wisconsin infants were born with low birth weight and among these, 853 were very low birth weight. Sixty-eight percent of the low birth weight babies were born premature. The total premature births reached 7,413, while there were 393 infant deaths under the age of one year in 2010 in Wisconsin.

Furthermore, “in 2009 14.8% of women in La Crosse County received no prenatal care during their first trimester” (U.S. Department of Health & Human Services, 2009). Lack of prenatal care during the first trimester or 13 weeks of gestation is a major risk factor contributing to infant death, low-birth weight, and birth defects. Oftentimes, women do not find out they are pregnant until three months following conception, so ensuring that women’s bodies are at optimal health before the chance of pregnancy, can greatly reduce the rates of infant mortality and morbidity (U.S. Department of Health & Human Services, 2009).

Although there are numerous topics related to preconception health, the “Eat to Live” program specifically focuses on the nutritional status of women of reproductive age on the three college campuses in La Crosse, WI. Proper nutrition is essential to both the mother and child’s health; inadequate nutrition can harm growth and development, while excessive consumption can lead to overweight, obesity, and numerous health complications (The Board of Regents of the University of Wisconsin System, 2010).

According to the U.S. Department of Health and Human Services, 78.2% of individuals in La Crosse County do not eat adequate amount of fruits and vegetables on a daily basis. This is a huge concern since a baby’s life depends on the health of the mother and needs specific nutrients to survive. The majority of the women on the college campuses are not planning for a pregnancy within the near future, so they may not be particularly concerned whether or not their body is in the best condition to become pregnant. However, a good nutritional status will be beneficial whether a woman is intending a future pregnancy or not. By targeting college age students, the “Eat to Live” program will increase awareness and education of preconception health and improve nutritional status and overall health of women of childbearing age (15-44 years old) in La Crosse County. College students are an essential population to target since their actions will influence their opinions, decisions, and lifestyle choices related to health in the future.

Methods:

Data: Preconception health involves a variety of important concepts related to the health and wellbeing of a mother and her offspring.
Perhaps the most important behavior relevant to women of reproductive age on a college campus is related to consumption patterns. For instance, proper nutrition is essential to both a mother’s and her child’s health. Inadequate nutrition can harm growth and development of the mother and child while excessive consumption can lead to overweight, obesity, and numerous health complications (The Board of Regents of the University of Wisconsin System 2010). Women who are considered underweight, overweight or obese have higher chances of complications during pregnancy.

Consumption patterns are related to other health behaviors such as preventive action. Increasing the amount of healthy nutrients in one’s diet drastically lowers the risk for birth defects, premature, low birth weight babies and infant mortality. In addition, these health behaviors relate to coping and self-care. Healthy eating plays a crucial role in the body’s ability to deal with times of extra stress. Carbohydrates, protein, fat, vitamins and minerals are all important for energy, mental concentration, and emotional stability. A healthy mother has a better chance of conceiving a healthy baby.

Nearly half of all pregnancies in the U.S. today are unplanned pregnancies. The number one Family Planning Healthy People 2020 objective is to “increase the proportion of pregnancies that are intended” (U.S. Department of Health and Human Services, 2012). Unplanned pregnancies are associated with many negative health and economic consequences. Unintended pregnancies include pregnancies that are reported by women as being mistimed or unwanted. The costs of births resulting from unintended pregnancies in the U.S. in 2006 were $11 billion. This figure includes costs for prenatal care, labor and delivery, postpartum care, and 1 year of infant care (U.S. Department of Health and Human Services, 2012).

The cognitive and physical development of infants and children is influenced by the health, nutrition, and behaviors of their mothers. Birth defects of the brain and spine happen in the very early stages of pregnancy, often before a woman knows she is pregnant. By the time she finds out she is pregnant, it might be too late to prevent those birth defects (U.S. Department of Health and Human Services). Common barriers to a healthy pregnancy and birth can include lack of access to appropriate health care before and during pregnancy. In addition, “environmental factors can shape a woman’s overall health status before, during, and after pregnancy by affecting her health directly and affecting her ability to engage in healthy behaviors” (U.S. Department of Health and Human Services).

The environments in which women live can greatly affect their health outcomes. Women of middle or upper class may be less likely to have high risk/unintended pregnancies than women of a lower socioeconomic status due to lack of information and access to contraception. Whether or not a woman participates in high-risk behaviors is also a crucial determinant in unwanted and unhealthy pregnancies. A woman who smokes, consumes alcohol and uses other illegal drugs is more likely to deliver an unhealthy baby (Birth Defects: Data and Statistics).

Although preconception health is important for everyone, there were three specific priority population segments our group focused on. The first priority population was students of reproductive age on college campuses in the La
Crosse Community. This population is important to target because more than half of all pregnancies are unintended. Therefore, it is important that women are educated and aware of the importance of reaching their own optimal health. This includes the importance of building up the essential vitamins and minerals in their bodies’ needed to ensure that future pregnancies are healthy and without complication. Nutrients such as folic acid need to be at adequate levels by the time of conception. It is important for women of reproductive age to consume folate and other essential nutrients, such as calcium and iron, in their everyday diets ensure their bodies have the right amount if they do become pregnant. The health of the mother is extremely detrimental to the future health of her infant.

A second priority population that our group focused on was women who smoke in La Crosse County. We focused on this population because there are many health risks associated with smoking during pregnancy. “In Wisconsin in 2010, 22.0% of women ages 18-44 reported smoking, compared to 17.6% overall in the U.S” (U.S. Department of Health and Human Services). It is important to focus on lowering the rate of women, who smoke, not only to aid in the future preparation of conceiving a child, but also to help individuals stop smoking to improve their overall health. It was also found that Smoking is an important determinant of health status and a major contributor to prematurity and low birth weight (March of Dimes, 2012). Reducing the number of women who smoke will help lower the rates of preterm and low birth weight infants.

The last priority population that our group looked to target was high school students in La Crosse County. This is an important focus group because behavioral habits are developed at a young age. Educating and empowering high school age students to practice safe and healthy behaviors is crucial in determining their future health. It is also important to specifically educate this age group on safe sex and contraception. Informing students of contraceptive methods and locations to find them will lower the unintended pregnancy rate and the spread of sexually transmitted infections (STIs), both of which are factors in determining the overall outcome of pregnancies.

**Activities:** The first priority population our group chose to implement the “Eat to Live” program with were students of reproductive age on college campuses in the La Crosse Community. Several activities were completed in the “Eat to Live” program. An educational PowerPoint presentation and short video clip were used to inform the participants about preconception health related data. The presentation focused on simple ways college students can change their lifestyles to improve their overall health. The video stressed the importance of a balanced, nutrient rich diet and encouraged participants to begin taking a multivitamin supplement. After the presentation, the facilitators used smoothie demonstrations and provided free samples to all participants in order to actively engage the audience and show them first hand how easy it can be to make a healthy, enjoyable snack. Informational brochures and healthy recipe books featuring a food substitution guide were handed out to participants so they could have the information with them at home. Also, a take-home self-assessment and a physician-guided health assessment were handed out to be used as a self-awareness tool and reinforcement method. Pre and post assessments were used to assess the
knowledge the participants gained from the program. Also, in collaboration with the Wellness Resource Center at UW-L, a “Stall-Seat Journal” was created and featured in 245 dormitory restrooms in order to promote the program and increase the health of freshman and sophomore college students.

Our second priority population was women who smoke in La Crosse County. The first activity featured a 6-week smoking cessation program. During this session women were given self-motivation skills in order to boost their ability to quit smoking. Barriers to quitting were addressed and benefits to quitting smoking will be made clear and promoted. At the first session, women will be given a pre-assessment to test their knowledge of preconception health and the risks that smoking has for the health of the mother and the child. Additional sessions included cooking demonstrations that the women take part in. During these sessions, women learned how to fight off cravings of cigarettes with healthy food options and healthy lifestyle choices (such as physical activity). The women were given take-home packets that included informational brochures, healthy recipe ideas with food substitutions, self-health assessments, and physician-guided health assessments to help reinforce the information learned at the program.

The third priority population our group chose was high school students in La Crosse County. Three activities that were completed for this population included a more extensive focus on preconception health in the health class curriculum, informational brochures on healthy eating for teenagers in the student center or other health facilities, and posters located throughout the school promoting healthy lifestyles into the future. By adding preconception health to the curriculum it helped raise awareness to young girls that they need to practice healthy behaviors starting at a young age. The program also focused on safe sex and contraceptive practices to reduce STI’s and unintended pregnancies, which are a huge issue for the health of the mother and the child.

**Evaluation Design:** A quasi-experimental design was used to create pre and post assessments in order to effectively assess the impact of “Eat to Live” program on participants’ knowledge, attitudes, and behaviors related to preconception health. Prior to the program implementation, each participant was given a survey related to health in general. The survey included questions related to current lifestyle behaviors and knowledge about preconception health.

In order to effectively measure the knowledge gained from the “Eat to Live” program, a post assessment was administered following the program that followed a quasi-experimental design. The post-assessment featured a qualitative component based on alickert-scale system in order to identify the likelihood of participants changing their behaviors due to the information gained from the program. The post-assessment also identified knowledge and attitudes related to preconception health as a result of the program. Similar, quasi-experimental surveys were administered to all three priority populations.

**Results:**

Pre and post-assessments were administered to determine information learned compared to information known prior to the Eat to Live
program. It was clear after reviewing the post-assessments that the 14 participant gained new preconception health knowledge from Eat to Live. Pre-assessment questions included lifestyle habits and nutrient intake of each individual prior to the program and results of the pre-assessment can be found in table one below. Post-assessments used a lickert-scale system to determine participants’ likelihood to change or adapt new behaviors in order to increase their overall healthy now that they had attended the Eat to Live program. Results of the post-assessments are shown in table two below.

**Table 1:**

<table>
<thead>
<tr>
<th>Pre-Assessment Results</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
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<tbody>
<tr>
<td>I engage in some type of physical activity that I enjoy</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>I usually get at least 7 hours of sleep per night</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I incorporate foods rich in folic acid into my diet</td>
<td></td>
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<tr>
<td>I take a multivitamin</td>
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After pre-assessment answers were compared to post-assessment answers researchers were able to determine that participants were most likely to start adding foods rich in folic acid into their diet based off the information gained from the program. Prior to the program, 5 participants were unsure of whether they were incorporating foods rich in folic acid into their diet, and 4 participants said they were not incorporating foods rich in folic acid into their diet. Results showed that by providing information on sources rich in folic acid participants became more likely to start incorporating those foods into their diet to get adequate daily requirement of the nutrient.

**Table 2:**

<table>
<thead>
<tr>
<th>Post-Assessment Results</th>
<th>0</th>
<th>2</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
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<tbody>
<tr>
<td>How likely are you to start engaging in some type of physical...</td>
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<tr>
<td>How likely are you to work on getting at least 7 hours of sleep...</td>
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<tr>
<td>How likely are you to start adding foods rich in folic acid to your diet</td>
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<td></td>
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<tr>
<td>How Likely are you to start taking a multivitamin</td>
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</table>

**Discussion:**

If we had additional time and resources, we would have implemented our program in La Crosse area high schools to promote preconception health to high school students. High school students are at an age where they need to be thinking about their overall health and how it can impact their future. We also thought that if our program plan would have been completed earlier, we could have gone into a class on the University of Wisconsin-La Crosse campus, such as Lifecycle Nutrition. By going into a class, we would have had a larger target population. The Lifecycle Nutrition class covers a chapter on preconception health, which would have aligned well with our program implementation.

If we were to do this program again, we would have added marketing strategies such as an ad on the UW-L website for our program and a Public Service Announcement (PSA) to go out
to the La Crosse community. By creating a PSA, preconception awareness would have been brought to many people’s attention in the community. It would have been interesting to send out a campus wide survey about preconception health to see what the general campus population knew or didn’t know. The biggest struggle of this program was not being able to go to our participants, but instead making them come to us. We tried to collaborate with the professor of Lifecycle Nutrition, but did not have a great response. By going to our participants, we would have had a greater participation rate. There are also other classes that we could have gone to such as Women’s Health or HPR. Finding a class that was willing to give up class time was difficult.

The MATCH (Multilevel Approach To Community Health) model was used for this program. The MATCH model says that programs need to be aimed at a variety of objectives and individuals. We had three target populations, women of reproductive age on La Crosse college campuses, women who smoke, and high school students in La Crosse, so our programs needed to be aimed at the variety of individuals we chose.

Acknowledgements:

The authors thank the Wellness Resource Center at UW-La Crosse for collaborating with their efforts and creating a “Stall Seat Journal” to help raise awareness and promote the “Eat to Live” program.

References:


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Society for Public Health Education
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Matagalpa, Nicaragua Preconception and Neonatal Resuscitation Training and Education Program

Kylie Hughes, Undergraduate Candidate in Community Health Education at the University of Wisconsin-La Crosse

Abstract  Infant and maternal mortality rates in Nicaragua are universally recognized as problematic. Education and resource levels in this country are low and therefore, the infant and maternal mortality rates are at an unnecessarily astronomical level. Midwives lack the knowledge and skills necessary to resuscitate babies, ensure healthy births, and promote and educate proper prenatal health. Maternal mortality rates are also high due to lack of prenatal care, literacy, and education levels. It could not be more evident that programs need to be implemented to train and educate midwives and therefore, reduce infant and maternal mortality rates. This program promotes a train-the-trainer technique where midwives and health care personnel will continue to train community members to ensure sustainability within the community. The priority populations include midwives, pregnant and soon-to-be pregnant women, and adolescents of reproductive age in the Matagalpa district of Nicaragua. Midwives will be trained and educated on resuscitation skills and preconception health. Women will be educated on preconception health and nutrition. Adolescents will be educated on nutrition and contraception. Bi-yearly assessments will be conducted and projected results include a reduction in infant and maternal mortality rates, increase in data collection and communication, sustainable equipment, improving nutrition, and decreasing adolescent fertility rates.

Key words Master Trainers-Participate in train-the-trainer workshop and make a commitment to training other trainers and facilitators (Helping Babies Breathe, 2012) Facilitators-Participate in a train-the-trainer workshop or a special session for policymakers and program managers. Work to advocate for neonatal resuscitation training and formulate a comprehensive and sustainable plan to deliver training (Helping Babies Breathe, 2012). Midwife – A person trained to assist a woman during childbirth. Many midwives also provide prenatal care for pregnant women, birth education for women and their partners, and care for mothers and newborn babies after the birth (MedicineNet, 2012). Birth asphyxia- Birth asphyxia happens when a baby's brain and other organs do not get enough oxygen before, during or right after birth. This can happen without anyone knowing (Seattle Children’s Hospital, 2012).
**Introduction**

Globally, neonatal mortality rates have increased more than 40% in 2010 (Unicef, 2012). A global goal is to reduce infant and maternal mortality rates among disparities in countries with above average rates. According to the National Institute of Health and Development, 98 percent of infant and neonatal deaths occur in developing countries and within the first seven days of life (NICHD, 2010). Birth asphyxia, low birth weight, and problems with preterm birth, and infections in developing countries are reasons for high infant mortality rates. The primary reason for both maternal and infant mortality is a lack of knowledge and skills by birth care providers which can potentially reduce infant mortality rates higher than 40 percent (NICHD, 2010).

National reasons for infant and maternal mortality rates would also be due to the economic status of the country. In developing countries, literacy and education levels are low which results in an increase in fertility rates and therefore, mortality rates (Zapata, 2004).

Nationally, infant and maternal mortality rates are a big public health concern according to the Center for Disease Control and Prevention Health Disparities and Inequality Report of 2011. Nicaragua also has a fertility rate that is double the average for Latin America (Unicef, 2011). Contraceptive use can help decrease adolescent birth rates (Lion, 2009). Infant mortality rates are highest in the poorest regions of Nicaragua. According to the Foundation for Sustainable Development, Maternal mortality rates are highest among disadvantaged groups such as rural and indigenous populations, poor, adolescents, and women with low education levels. Many mothers and children are also malnourished due to a lack of nutrition education. Self-care in relation to diet and nutrition, as well as education and literacy levels, can help reduce mortality rates.

The Matagalpa district in Nicaragua is a local area that is most in need of program implementation (Klevan, 2012). The Matagalpa district is located in the mountainous region of Nicaragua making transportation, communication, and access difficult which attributes to higher infant and maternal mortality rates, according to Dr. Judy Klevan. Midwives and health care providers lack the knowledge and skills necessary to resuscitate babies and promote pre and postnatal care for the mothers.

Preventive actions should include sanitation efforts of health care facilities, resuscitation kits, and routine neonatal care; all of which can greatly prevent infection and infant and mortality rates. Utilization of health care services and skilled births can reduce mortality rates and improve intelligence and literacy levels.

For families, a mother’s death can be very serious and can affect the health of children globally which, in turn, greatly impacts their quality of life. These health concerns are problematic and the death of a mother can also greatly influence the development of a country. Economic and social capacity of the family and society can also affect the social consequences of this health concern and can potentially make them more severe causing quality of life to dwindle.

**Methods**

One of the biggest environmental determinants of infant and maternal mortality is the lack of resources in Nicaragua. Children have developmental needs and because of this they are vulnerable to environmental problems, Air, water, food, pesticides, and toxins affect the health of the infant and mother, as well as mortality and morbidity rates. Health promotion and prevention, curative health care, sanitation, vaginal delivery, and resuscitation kits are issues that affect the social environment (Zapata, 2004). Literacy and education levels of
the mothers are also determinants of this health concern. Genetic causes of infant and maternal mortality and morbidity include immune statuses of both the baby and mother, malnutrition of infants and mothers, genetic diversity, biological gender differences, functioning of the internal organ system, and infectious and chronic diseases.

There are many behaviors that can either increase or decrease infant and maternal mortality rates. Sanitation efforts of health care facilities to reduce infection, resuscitation kits, and routine neonatal care can pose a reduction among infant and maternal mortality rates are a few. However, not many of these preventive actions are currently being implemented in the Matagalpa district. Poor nutrition habits result in malnourished children and mothers which can create many adverse health effects. However, from past visits to Nicaragua it has been determined that the communities within this district are eager and willing to create behavioral and environmental changes to result in a significant decrease of infant and maternal mortality rates.

The behaviors of each priority segment greatly impact maternal and infant mortality rates in Nicaragua. Midwives lack the knowledge necessary to resuscitation infants, educate mothers and adolescents on preconception health, promote clean working environments, and educate on nutrition. In turn, mothers and adolescents do not have the knowledge and skills necessary to properly care for themselves and their children. Literacy levels among mothers are also low and contribute to the high mortality rates. Less educated adolescents are also at a higher risk for adverse health effects because they are more likely to become pregnant due to high fertility rates, which increase mortality rates.

After midwives are trained and educated on neonatal resuscitation, pre/postnatal health, nutrition, and sanitation, they can then teach mothers and adolescents this information. They would also educate adolescents on contraception to reduce the extremely high fertility rate which accounts for many infant and maternal deaths. This education and training for midwives, mothers, and adolescents would cause a dramatic decrease in infant and maternal mortality rates in the Matagalpa district.

The first population segment consists of the midwives and other health care personnel in the Matagalpa district. The first activity involves the training and education of neonatal resuscitation techniques. This population will use NeoNatalie kits including simulators, resuscitation devices, suction bulbs, and workbooks. They will use this equipment to practice reviving the mannequin to successfully learn neonatal resuscitation techniques as most neonatal deaths occur within hours after birth (Little, 2010). This population will keep the equipment to continue training other community members in the district. Midwives and health care personnel will also be trained on sanitation efforts and clean clinical environments to reduce infection (Luzano).

Another activity of this population segment consists of proper prenatal and postnatal education of mothers and their children. They will learn about nutrition and how it can affect the health of the mother and the child, as well as its importance when breastfeeding. Midwives will then be able to successfully educate mothers on proper care to ensure healthy mothers and babies.

Midwives and health personnel will then learn the methods of the train-the-trainer technique. They will learn how to successfully pass on the information and skills they have learned to mothers, community members, and adolescents in the Matagalpa district. By teaching skills and information, it ensures sustainability in the program and what they have learned from it. Also, it allows infant and maternal mortalities to continue to decrease well into the future.
Goals of these activities include an increase in knowledge and skills of the midwives and health care personnel in neonatal resuscitation and proper pre and postnatal health for mothers, reduced infant and maternal mortality rates, a reduction in infectious diseases and low birth weight infants, and health and skilled deliveries.

The second population segment consists of pregnant and soon-to-be pregnant women in the Matagalpa district. The first activity this population will participate in is a pre and postnatal health educational program. Here, the mothers will receive educational materials such as handouts, visuals, resources, and workbooks that allow the mothers to learn the information being taught. This activity will teach the mothers to properly care for their children before and after pregnancy which will greatly reduce infant and maternal mortality and morbidity rates. The second activity will involve a hands-on interactive learning experience involving nutrition education to ensure healthy mothers and babies. This activity will educate mothers on how to choose the best foods and clean drinking water to reduce infection and adverse health effects. The third activity involves combining nutrition with breastfeeding to ensure healthy nutrients are being passed onto newborns after birth. Recommended nutrients and supplements will be taught and samples will be provided among the population segment. This part of postnatal care will greatly improve both child and maternal health.

Goals of these activities include an increase in knowledge and skills of pre and postnatal care, a reduction of infant and maternal mortality rates, a reduction infection and low birth weight infants, and an increase in access of skilled deliveries. Other goals include diminishing language and communication barriers among mothers in the community as well.

The third priority population consists of adolescents of reproductive age in the Matagalpa district of Nicaragua. The first activity this program will participate in is an educational portion which will teach adolescents proper nutrition and pre and postnatal care. Many times infant deliveries occur in the home and it is important adolescents learn how to properly deliver and care for infants early. They will learn about general health using videos and handouts. The second activity of this program will train the adolescents on skills to care and deliver children. The adolescent fertility rate in Nicaragua is double that of Latin America (Unicef, 2012) and if adolescents are educated on proper maternal and childcare, it will allow for a reduction in maternal and infant mortality rates. Another activity will include the education on contraceptive use among adolescents. Due to the astronomical fertility rate, contraception is not easy to obtain and not usually used. According to an assessment by the Gundersen Lutheran, Global Partners team, 39 percent of the population is currently using contraception. However, 55 percent said it is not easily available and 28 percent said it was not easy to obtain. This activity will use handouts that show each type of contraception as well as advantages and disadvantages to each method. It will also include resources about where adolescents can obtain contraception. By having knowledge about contraception, fertility rates can be reduced which will also reduce infant and maternal mortality rates.

Goals of this program include improving and increasing the contraception knowledge of the adolescents to greatly reduce fertility rates. Another goal would be to reduce infant and maternal mortality rates by reducing fertility rates. Also, by increasing contraception education, another goal would include reducing infectious diseases and improving maternal and child health.

For the evaluation of this program, the Gundersen Lutheran and Helping Babies Breathe evaluation instrument will be used. This
The instrument consists of surveys that will be delivered to each program participant. The surveys include questions that reflect each activity of the program. The surveys will determine what skills and knowledge the participants gained from the program. These surveys will be adapted specifically to each priority population to better reflect what they have gained from each activity of the program. These will be a successful evaluation tool which will help in the future improvement and development of the program. Vital statistics will also be analyzed to evaluate this program. Birth registries are an important part of program evaluation and they will determine if infant and maternal mortality rates were improved. Positive and adverse outcomes will be recorded to track the program impact. Summary forms may need to be revised to ensure pieces of information are routinely checked (Helping Babies Breathe, 2010). The program evaluation will be conducted on a bi-yearly basis when assessments are made, beginning six months after program implementation. The evaluation will then continue every six months until the three-year pilot is over, in which case the results will be assessed over that entire time frame to determine the greater effects of the program.

**Figure 1:** *Helping Babies Breathe* framework for evaluation. This framework will be utilized and followed in addition to other evaluation methods as previously listed.
Results

As the location for this program is the Matagalpa district of Nicaragua, program implementation has not yet taken place. The intended implementation date is in November of 2012. However, there are many projected results of this program, the first being an increase in data collection and communication. Track phones will be provided to community members who are participating in the midwife training program. These phones will eliminate communication barriers and increase the accuracy of birth registries in which evaluation data will be obtained. It is important to note that the infant and maternal mortality rates will initially increase, as many of them are not recorded, but within 6 months of program implementation these rates are expected to decrease dramatically. Another result of this program implementation involves the midwives in the communities of the Matagalpa district successfully learning neonatal resuscitation techniques and preconception care. They will be provided with equipment they can keep and utilize among the communities to continue training. The initial community members will become skilled birth attendants after program implementation and this will result in successful training and performance.

The biggest result of this program will be the number of lives saved by the skilled birth attendants, midwives, and doctors within one minute after birth of an infant. This will result in a reduction of infant and maternal mortality rates which is the main goal of this program. Other results of this program include an improvement of nutrition throughout all members of the Matagalpa district. This will result in better overall health for community members which will ensure newborns will get the proper nutrition through breastfeeding as well. The mothers will not only gain information on nutrition and its importance, but also on pre and postnatal health as well. This will allow the mothers to properly care for their babies before and after birth to ultimately reduce mortalities and morbidities. Adolescents will gain knowledge and skills necessary to assist in home births and promote pre and postnatal health as well which will result in improved health of the adolescent. Also among adolescents there will be a significant reduction in the fertility rate due to contraception that will be provided. Once different contraceptive methods are obtained, adolescents can prevent births and therefore maternal and infant deaths.

Discussion

The results listed above are the ideal outcomes after program intervention. However, since the program has not yet been implemented it is difficult to determine what can be changed or done differently. The evaluation instruments will be used to improve the program for future use. If additional time and resources were available, the program could be adapted to complete the program plan and implementation in a more successful way. First off, the Matagalpa district is only one region in Nicaragua with alarming infant and maternal mortality rates. If more time and funding were available, the program could be expanded to reach each district and region in Nicaragua. That way the mortality rates of the entire country could be lowered instead of just one district. Also, if time and other resources were available, the doctors who are implementing the program could stay longer and complete more educational and training sessions. More equipment would be provided to reach other regions and sustainability of the program would not have to rely on train-the-trainer techniques among community members.

Currently, the community members, mothers, and adolescents have a very clear understanding of what needs to change in regards to infant and maternal mortality rates in Nicaragua. However, the health care professionals do not necessarily realize the severity of the problem. According to Dr. Suzanne Toce of Gundersen Lutheran, the
health professionals believe the number of unskilled, in-home births is far less than skilled births in health facilities.

Since the Nicaraguan health professionals believe this, the government, too, believes this. In order to help the health care professionals understand the severity of this problem, Gundersen Lutheran doctors and Rainbow Network doctors travel to Nicaragua in April before the November implementation date. In April the doctors familiarize themselves with the district, the community members, and the health care personnel. During this time, the doctors could educate the Nicaraguan professionals on the problem and why it needs to be changed. The government can then be persuaded as well which will make the change easier to occur. The community members themselves would also be very effective in persuading the rationale behind the program and its priority population segments.

This project taught me a lot about program planning and implementation. I have about the planning process and I feel I have a much better understanding of the time, resources, and knowledge necessary to plan a program. I would say I successfully learned about each task of program planning such as the rationale, the literature review, the assessment, the logistics of the plan and everything that goes into it, and the evaluation. From other classes I have learned how to successfully collaborate with a group in projects and I am grateful I had the opportunity to do each task of the program planning on my own. I feel a great sense of achievement knowing this is my work and I learned more than I had already known about time management and work ethic. I am confident the knowledge I have gained will be of great use to me in my future and in my preceptorship as well.

References


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Important texting for you...

**BTW U NEED 2 KNOW...**
About Undergraduate Preceptorship in Community Health Education

**GET MANUAL...**
The Preceptorship Manual is emailed to every CHE major each September and January

**GET ADVICE...**
Academic advisors, other faculty, professionals in field, and other students...they all have it.

**EXPLORE...WHOA!**
Volunteer, summer work and internships, shadow, travel, Sharing Sessions

**SHARING SESSIONS...OMG**
3 times a year students return and tell about their preceptorship experience
all majors receive announcements about sessions
webcast links will be manuals starting Fall 2012
majors receive webcast links and sharing session information

**f1...f2...f3?**
Prepare and submit forms on time to maximize the value of your required preceptorship.

<table>
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<th>Form 2 due to Academic Adviser</th>
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Form 3 is the Proposal of Involvement and it is something your prepare with a faculty adviser and the faculty adviser submits your proposal to the preceptorship site for acceptance.
Merging Mental Health Resources for Students at the University of Wisconsin-La Crosse with the La Crosse Human Services Mobile Crisis Unit

Ashley Ewens, Kelly Lange, and Jessica Ramel,
Undergraduate Candidates in Community Health Education at the University of Wisconsin-La Crosse

Abstract: Mental illness is an important concern worldwide. In the United States alone, it is found that only 17% of adults are considered to be in a state of optimal health (CDC, 2011). It was found through the La Crosse Medical Health Science Consortium and researcher Tara Delong that La Crosse especially suffers from mental illness and has one of the highest rates of suicide of all counties in the state of Wisconsin. The student population at the University of Wisconsin-La Crosse is no exception to these findings. Through investigation of campus resources relating to mental and emotional health, it was found that the University of Wisconsin-La Crosse’s Counseling and Testing Center is finding difficulty in responding to the overwhelming student need for counseling services and other resources. It is for this reason a collaboration between the university and La Crosse County was needed.

Key Words: Depression: “Everyone occasionally feels blue or sad. But these feelings are usually short-lived and pass within a couple of days. When you have depression, it interferes with daily life and causes pain for both you and those who care about you. Depression is a common but serious illness” (What is depression, 2011). Stress: “Stress can be defined as the brain's response to any demand. Many things can trigger this response, including change. Changes can be positive or negative, as well as real or perceived. They may be recurring, short-term, or long-term and may include things like commuting to and from school or work every day, traveling for a yearly vacation, or moving to another home. Changes can be mild and relatively harmless, such as winning a race, watching a scary movie, or riding a rollercoaster. Some changes are major, such as marriage or divorce, serious illness, or a car accident. Other changes are extreme, such as exposure to violence, and can lead to traumatic stress reactions” (Fact sheet on, 2012). Mental Health: “A state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (Mental health basics, 2011). Mental Illness: “Collectively all diagnosable mental disorders” or “health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning” (Mental health basics, 2011). Mental Health Crisis: “An intensive behavioral, emotional, substance use, or psychiatric situation which, if left untreated, could result in an emergency situation” (Crisis services, 2012).
Introduction

Mental illness is a priority health concern at the worldwide, national, state, and county level in La Crosse, WI. The Wisconsin Department of Health Services did a report of suicide deaths in all 72 Wisconsin counties, reporting the number of deaths by suicide from 2007-2009, and the years of potential life lost. La Crosse County had a rate of 41 suicide deaths during that two year span which came to a rate of 12.1 per 100,000 and equaled 1,279 years of potential life lost (De Long, 2011). Through preventative measures and resources in the La Crosse community, these suicides could have been prevented.

One way we are looking at doing this on a campus level is through stress management presentations and stress relieving sessions such as art and music therapy. “Working with art media and other creative tools such as music and movement, provide both the therapist and the client with ways to develop awareness beyond the traditional verbal focus of interventions and at the same time experience enjoyment, fun and a greater sense of well-being” (Starak, 2012, 1). These programs would be similar to those that the Counseling and Testing Center already does, but would be put on for students by students with their guidance, making them more student friendly.

La Crosse County has a program known as Mobile Crisis, where people can call in and receive guidance when they are experiencing mental health crisis situations. The results of the program have proved the resource to be effective in various ways such as reducing emergency room visits, reducing health care costs of the greater La Crosse community and helping reduce the severity of suicidal situations among individuals while creating awareness and reducing the negative stigma regarding mental illness.

A needs assessment found that on the University of Wisconsin-La Crosse campus, students are finding difficulty in gaining access to the mental and emotional health resources on campus. This is because the Counseling and Testing Center on campus, which provides resources, counseling services and group activities regarding mental and emotional health, is experiencing an increase in the need for their services, making the wait for some students to receive services in non-emergency situations sometimes up to three weeks long.

By providing the Mobile Crisis Unit with resources and connections to the University of Wisconsin-La Crosse campus, students will have another resource to use in crisis situations when the Counseling and Testing center is unable to accommodate them or in after hour situations. The bridging of these two resources will help these alarming statistics of suicide in the La Crosse population, specifically the student population of the University of Wisconsin-La Crosse, decrease.

Methods

According to the world health organization, when comparing all diseases, mental illness rank first in terms of disability in the United States, Canada, and Western Europe (World Health Organization, 2001). Serious mental illness costs Americans at least $193 billion a year in lost earnings alone (Kessler et al., 2008). Lost earnings are just one aspect of the total economic burden, which also includes direct treatment costs such as medications and physicians’ care (Kessler, 2008). Treatment of mental health disorders are an enormous social and economic burden to society themselves, but are associated with an increased risk of physical illness (De Long, 2011). There is no denying the connection between mental and physical health. More specifically mental health disorders are associated with chronic disease risk factors such as obesity, smoking, physical inactivity, and substance abuse. Which add more complications
to the rising cost of medical care and treatment. Furthermore by engaging in these behavioral causes, the individual increases his chances of years of potential life lost. As future community health educators it is our job to assess and plan programs which identify the environmental, behavioral, and modifiable risk factors that can be changed to help reduce morbidity, mortality and disability.

Although mental health can occur in any individual, key priority populations such as the elderly and college students are at a higher risk than others. According to the Centers for Disease Control, suicide is the second leading cause of death among college students. Closer to home, on the University of Wisconsin La Crosse campus, there are on average six attempts at suicide per year, with two deaths occurring over the past 15 years. Recent knowledge gained through the American College Health Assessment, indicate over 30% of undergraduate students have had feelings of anxiety and depression.

Institutions of higher education are an important atmosphere to access college students, because they are very accessible to programs which teach prevention methods, such as life skills including communication, and coping skills. Mental health is a serious and complex health issue and although prevention is the most effective method to reduce cost, prevention cannot always happen, therefore the need for primary care services as well for crisis care services are also a must, and thus made up our other priority population.

Through face-to-face meetings as well as email communication, we started to form a collaboration between the Mobile Crisis Unit and the University of Wisconsin La Crosse, planned activities with the Mobile Crisis center included a training sessions giving responders further information about the major stressors of college students, a resource binder as well as a question and answer session. The resource binder was designed for the employees of the Mobile Crisis Unit with information about various programs and support groups that students could connect with, for example the Counseling and Testing Center, Active Minds, as well as SPILL, programs addressing mental health issues as well as advocate that mental health is an not merely the absence of disease.

The evaluation of our program activities that were run were accomplished in two different ways. For the training session with the Mobile Crisis responders, surveys were given after the training session which asked questions like “Did you find that the training session better prepared you to take calls from college students?” and “Will you use the information learned in this session in the future?” Other evaluation measures plan to be administered in December of 2012, as to whether the information from the sessions were actually used by data collection of actual phone calls made, but as far as immediate evaluation after the training sessions, the survey was used. Evaluating the effectiveness of the resource binder will again be difficult to do on a short term basis. An accurate and complete evaluation of the resource binder will also need to be done in December of 2012 by a checklist provided within the binder where responders check a box for different resources they used during calls with college students. From this, it will be clear as to how often the resource binder is being used, and more importantly, which resources within the binder were most helpful. However, to provide a short term evaluation, feedback from Donna Christianson, Clinical Supervisor of the Mobile Crisis program was used as to whether she thought this would be a helpful resource for the department or not.

Results

In the time frame of the semester, we were able to accomplish two of our program activities with the Mobile Crisis Unit. The first was to create and present a resource binder for individual crisis responders so that they will be
familiar with the mental and emotional health resources at the University of Wisconsin-La Crosse when students call the crisis line. The second was to provide a training session for responders on how to effectively communicate with student callers. The results of both program activities were positive. We did not have time to implement any activities with the student population at the University of Wisconsin-La Crosse. Feedback from Donna Christianson, Clinical Supervisor of the Mobile Crisis showed us that the resources will be used in future calls and that they will be a good resource for the Mobile Crisis Unit and the La Crosse Human Services Department in general. However, because of the ongoing process of the program evaluation, immediate results of the use of the resource binder are unavailable. Surveys given to the responders after the training session showed that they found the session to be helpful and that they feel better prepared to respond to student crisis calls in the future. 96% of the crisis responders that attended the training sessions felt that the information given to them would better prepare them to handle crisis calls from college students.

Discussion

If there were additional time and resources available, we would have changed a few things about the project that was implemented. First, we would have administered a follow up survey to the Mobile Crisis Unit on the effectiveness and relevancy of the training session. Ongoing question and answer session would have also been held during the Mobile Crisis Units scheduled meetings every three weeks.

Also, programming with the student population would have been implemented. Presentations on how to effectively manage stress along with art and music therapy session would have been completed in order to directly address the student population we were overall looking to positively affect.

Theories that may guide future research in the study of mental and emotional health could be the Theory of Reasoned Action and Planned Behavior, to assess the Mobile Crisis Responders and the Social Network Theory/Social Support Theory could be used to guide the assessment of students on campuses dealing with mental and emotional health issues like depression, anxiety and stress related disorders.

We also found through this project that although there is an abundance of mental health resources available to students at the University of Wisconsin-La Crosse campus at the La Crosse community in general, there is a severe lack of connection between these resources. We were able to connect two of them by bridging the Counseling and Testing Center on campus with the La Crosse County Mobile Crisis Unit, however, these lack of connections could indicate implications for further future research.

From this project effort, it is clear that a great amount of time is needed in order to create an accurate, thorough, and most importantly, effective program for the populations you are wishing to help. Even with the time constraints of the semester, positive outcomes were still able to come out as a result. However, what this has taught us as far as future assessment of populations and implementations of programs is that in order for a program to be effective, thorough planning and preparation is required. This project has also helped portray the importance of having collaborative organizations involved with program implementation. One of the aspects of the project we struggled with over the course of the semester is focusing the need for a mental health program and what the most effective type would be. It was not until the collaboration occurred with La Crosse County that an organized thought process for a mental health program was developed.
References


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**FORM I – Community Health Education Preceptorship**

**Site Request Form**

Intended Preceptorship Period: Year _______ Semester(\(\checkmark\)) one fall ____ spring ____ summer ____

Submit this form and the required background documents so that your advisor may submit them to the Preceptorship Coordinator by October 1 for summer or fall, OR by February 14 for spring preceptorships.

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<th>Advisor name:</th>
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<tr>
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<td>Campus or cell phone:</td>
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<td>Minor(s):</td>
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### Required Background Documents

1. Obtain a written graduation Check-Out Summary from the Assistant to the Dean in room 124 Mitchell Hall. Call ahead for an appointment (785-8156) for this “credit check.” The completed credit check must be attached to this form when you submit it to your academic advisor.

2. Prepare a typed document describing your rationale for your preceptorship. Your rationale must clearly label and include the following elements:
   a. Your professional goals.
   b. Your interest in specific health issues, special practice settings, and particular population segments.
   c. Identify three preceptorship sites by name and location; number these from 1 to 3 indicating your first through third most preferred sites for your preceptorship. Tell how these sites would help you meet your professional goals and specific interests.
   d. Tell about any personal connections, communications, or experiences you have with the sites you have prioritized.
   e. If you are requesting a summer preceptorship, you must include your reasoning for choosing summer over spring or fall semesters.

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<td>Academic Advisor</td>
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<td>Undergraduate Preceptorship Coordinator</td>
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Revised 08/20/2009
FORM 2 - Community Health Education Preceptorship
APPLICATION FOR ADMISSION
Department of Health Education and Health Promotion

Name: ________________________________________________________________________

I. To be completed by the student:
A. Total credit hours to be competed at the end of this semester (or the following
   Summer session, 90 credits needed for senior standing)
B. Fields of study and grade point average:
   Major __________ Community Health Education __________ GPA
   Second Major __________ GPA
   (do not list minors here)
   Cumulative grade point average __________ GPA
   (see your transcript)
C. Semester for which application is being made:
   I (Fall) _______ II (Spring) _______ *(Summer) _______ 20____

This form is due March 1 for summer and fall and October 14 for spring preceptorships.

II. Student Understanding:
A. To the best of my knowledge, I have no medical deficiencies which might limit
   my effectiveness as a Preceptee or I have discussed any potential medical
   deficiencies with my Preceptorship Advisor.
B. I understand all the requirements for admission to the CHE Preceptorship.
   1. 2.75 minimum cumulative GPA
   2. 2.75 minimum major GPA
   3. completion of all required course work
   4. advisor’s recommendation

   ____________________________
   Signature of Student             Date

III. Faculty Recommendations:
Based on my knowledge, and pending final completion of all requirements within the
Community Health Education professional preparation program, I recommend this
student for admission to the Community Health Education Preceptorship Program.

   ____________________________
   Academic Advisor               Date
   ____________________________
   Preceptorship Advisor          Date

IV. To be completed by the Dean of the College:
This student has met all the requirements for admission to the Community Health
Education Preceptorship.

   ____________________________
   Signature of the Dean of the College       Date
Community Health Education Major: Computation of Major GPA

1. Number of grade points per credit: A=4, AB=3.5, B=3, BC=2.5, C=2, D=1, F=0

2. To compute the grade point average in the major: For each course, multiply the number of credits times the grade points and place total and place total in “Grade Points” column. Then divide the total grade points by the total credits.

3. Only grades earned at UW-L are figured in the grade point average.

4. The following courses** should be used:

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Electives (6 credits)
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2. 
3. 
4. 
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6. 
7. 

Total credits = _______  Total grade points = _______

Total grade points / Total credits = Major Grade Point Average

Revised 08/20/2009
More Than Aware, Take Care: Safe Sex Scavenger Hunt

Caitlin Jezwinski, Bonnie Erickson, Kelli Grilley, and Kathryn Leone, all Undergraduate Candidates in Community Health Education at the University of Wisconsin-La Crosse

Abstract: The purpose of Be More Than Aware, Take Care: Safe Sex Scavenger Hunt is to reduce the rates of Chlamydia and to help create a healthier community throughout La Crosse County by providing resources and advocating for sexual health education and safe sex practices. The program is a simple intervention and single follow up design, targeting college students aged 18-24 in La Crosse County, WI. The intervention includes a poster campaign, Chlamydia focus group and a Safe Sex Scavenger Hunt, all of which promote STI Awareness Month. Oral and written feedback from scavenger hunt participants indicated a high degree of program satisfaction along with an increase in STI knowledge and awareness.

Key words: safe sex, condoms, scavenger hunt, alcohol use, chlamydia, college students

Introduction

Sexually transmitted infections (STIs) are 100% preventable, yet the incidence and prevalence rates continue to rise globally. “448 million new infections of curable sexually transmitted (syphilis, gonorrhoea, chlamydia and trichomoniasis) infections occur yearly throughout the world in adults age 15-49 years,” (WHO, 2011). Sexually transmitted infections do not discriminate affecting people of all ages, ethnicities, income levels, and backgrounds. “In developing countries, STIs and their complications rank in the top five disease categories for which adults seek health care,” (WHO, 2011).

In La Crosse County there were 407 cases of STIs, in 2010 and of the cases, 381 were Chlamydia (WI STD Program, 2010). In regards to demographics, there are 22,173 men and women between the ages of 15 and 24 in La Crosse County. In addition, according to Dhs.Wisconsin.gov 15-24 year olds lead the pack for reported STD cases at a monstrous 70% of new cases in 2009 for Chlamydia, Gonorrhea and Syphilis, which are the most common Sexually Transmitted Diseases.

Because young adults account for the large majority of reported STD cases, the Be More Than Aware, Take Care program focused on individuals between the ages of 18-24. Turchik and Gidycz indicated that casual sex, having
sex with multiple partners, having sex while under the influence of alcohol or drugs, inconsistent use of condoms, and not engaging in dual use (simultaneous use of condom and another form of contraception) are all high risk behaviors that are relatively common on college campuses (2012). Given that the CDC indicates that, “Chlamydia can be transmitted during vaginal, anal, or oral sex,” and that La Crosse has three college campuses in a two mile radius and a very high prevalence of bars the city of La Crosse an environment that is extremely conducive to the spread of STI’s.

Working in conjunction with the La Crosse County Health Department, we developed a program to address this issue. This program, STD Awareness Month in April: Be More Than Aware, Take Care, promoted awareness of the prevalence of STI’s as well as the importance of condom use and prevention, and local STI screening resources. It also lessened the barriers of affordability and accessibility, by providing condoms free of charge in the residence halls.

Dealing with this health concern locally will help 18-24 year old young adults by raising awareness of the STI rates in La Crosse County, informing people of available resources for testing and acquiring condoms and by educating people about the risks of unprotected sex. By addressing the high rates of Chlamydia and other STI’s by focusing on testing and preventative actions we can also help improve the quality of life for our young adults and the many college students that come into this community.

Methods

Data on sexually transmitted diseases were retrieved from various resources through the process of an in depth review of the literature. Data collection was completed between February 11, 2012 and February 24, 2012 to support the development of a health education and promotion program about STD prevention among 18-24 year-old college students attending UW-L. The resulting literature review addresses the following topics:

- Definition of important terms and concepts
- Health consequences of STD’s and Chlamydia for morbidity, mortality, disability and fertility
- Social consequences of STD’s and Chlamydia
- Genetic determinants of STD’s and Chlamydia
- Physical environments as determinants of STD’s and Chlamydia
- Social environments as determinants of STD’s and Chlamydia
- Behaviors as determinants of STD’s and Chlamydia
- Evidence of successful interventions in response to STD’s and Chlamydia
- International, national, state and local resources

The review of each topic was completed using the resources accessible through Murphy Library as the University of Wisconsin-La Crosse, as well as discussions with Kate Lesnar, a representative from the La Crosse County Health Department, Laura Runchey, a representative from the AIDS Resource Center of La Crosse and Karolee Behringer, Community Education Manager at Options Clinic of La Crosse. The need for a program addressing awareness, education and prevention of STD’s was demonstrated through the following data on environmental, genetic, and behavioral factors.

The role of physical environments can greatly impact the rate of sexually transmitted diseases. Risky behavior is associated with numerous
physical environments; a prospective analysis, indicated that casual sex, having sex with multiple partners, having sex while under the influence of alcohol or drugs, inconsistent use of condoms, and not engaging in dual use (simultaneous use of condom and another form of contraception) are all relatively common on college campuses (Turchik & Gidycz 2012). Additionally, by age 24, at least one out of every four Americans has been infected by a sexually transmitted disease (STD) and people under 25, account for two-thirds of all new infections (Ehrhardt Et. Al. 2006).

Social environment plays a critical role in contracting sexually transmitted disease because it refers to the culture of the individual and the people he or she interacts with. Family values, religious beliefs and cultural practices all influence an individual’s perceptions of sex an can have an effect on whether or not they choose to protect themselves. Additionally, poverty can play a role in many college students’ lives in terms of the availability and the accessibility of birth control and more specifically condoms when trying to prevent STDs.

There are many behavioral determinants that affect the contraction of a sexually transmitted infection, but the consumption of alcohol is one of the most significant behavioral determinants affecting sexual practices (Kalichman 2010).

In regards to preventive action, the three most significant preventive behaviors are condom use, monogamous sexual relationships, and abstinence. “Latex male condoms, when used consistently and correctly, can reduce the risk of transmission of chlamydia, gonorrhea, and trichomoniasis,” (STD, 2011, p.1). However, “because many teenagers and young adults fail to use condoms correctly and consistently, the number of sexual partners they have is an important risk factor for sexually transmitted diseases, including HIV,” (Santelli, 1998, p.271). Finally, the most effective method to prevent contracting an STD is abstinence from vaginal, oral and anal sex.

In planning a program or intervention it is important to take into account knowledge, needs, assets and capacity related to the service population to appropriately focus efforts. In this case, awareness of the prevalence of STI’s in La Crosse county, where and how to get tested, and the presence of protective measures in high-risk environments are all needs. Additionally, the stigma and perception associated with STIs and carrying condoms are areas that need to be addressed.

There are many reasons why we chose to focus our program to address college students age 18-25. Table 1 provides the rationale for the priority population segment.

In addition to 18-25 year old college students, two additional priority population segments are important to address, bar owners in La Crosse Wisconsin and 9th-12th grade high school students in the La Crosse School District. However due to time constraints, the efforts of our program presented in this article are focused only on the college population.

Planned activities for 18-25 year old college students include a Chlamydia Focus Group, a Poster Campaign on Campus and the Safe Sex Scavenger Hunt. The Chlamydia Focus Group was held at the UW-La Crosse library in conjunction with Kate Lesnar from the La Crosse County Health Department. This focus group had approximately ten participants. The focus group targeted barriers of safe sex practices and potential ways to overcome them, misconceptions of STIs (including Chlamydia), and the negative stigma attached to both STIs and condoms use.
### Table 1: Rationale for Priority Population

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</tr>
<tr>
<td>Specific to females: “Because the cervix (opening to the uterus) of teenage girls and young women is not fully matured and is probably more susceptible to infection, they are at particularly high risk for infection if sexually active,” (STD, 2011, p.1).</td>
<td></td>
</tr>
<tr>
<td><strong>Social Roles:</strong></td>
<td></td>
</tr>
<tr>
<td>College students: Prediction of Sexual Risk Behaviors in College Students Using the Theory of Planned Behavior: A Prospective Analysis, indicated that casual sex, having sex with multiple partners, having sex while under the influence of alcohol or drugs, inconsistent use of condoms, and not engaging in dual use (simultaneous use of condom and another form of contraception) are all relatively common on college campuses (Turchik &amp; Gidycz 2012).</td>
<td></td>
</tr>
<tr>
<td>Alcohol Use/Being Out in the Bars: “Alcohol use is associated with risks for sexually transmitted infections (STIs), including HIV/AIDS. People meet new sex partners at bars and other places where alcohol is served, and drinking venues facilitate STI transmission through sexual relationships within closely knit sexual networks,” (Kalichman 2010).</td>
<td></td>
</tr>
<tr>
<td><strong>geography</strong></td>
<td>La Crosse County</td>
</tr>
<tr>
<td><strong>size</strong></td>
<td>In La Crosse County there are 22,173 men and women between the ages of 15 and 24. From that, there is an estimation that about 7,850 of them has Chlamydia,Gonorrhea or Syphilis, which are only three of the five major STDs in Wisconsin, which also include Chancroid and Pelvic Inflammatory Disease, (Wisconsin, 2011).</td>
</tr>
</tbody>
</table>

#### Possible Priority Population Segments Within the Service Population

- **based on epidemiology**
  - Females: “Because the cervix (opening to the uterus) of teenage girls and young women is not fully matured and is probably more susceptible to infection, they are at particularly high risk for infection if sexually active,” (STD, 2011, p.1).
  - In addition, since 15-24 year old females are at a high risk for infection they will benefit most from the program.

- **based on**
  - College students
  - Location/Social Participation: There is a high concentration of 18-24 year
### Accessibility

<table>
<thead>
<tr>
<th>old young adult college students living and involved in college campus. There is also a high concentration of 18-24 year old young adult college students recreating in the bars downtown La Crosse.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resources:</strong></td>
</tr>
<tr>
<td><strong>Student Health Center</strong></td>
</tr>
<tr>
<td>1st floor of the Health Science Center</td>
</tr>
<tr>
<td>13th &amp; Badger St.</td>
</tr>
<tr>
<td>La Crosse, WI</td>
</tr>
<tr>
<td><strong>Counseling and Testing Center</strong></td>
</tr>
<tr>
<td>2106 Centennial Hall,</td>
</tr>
<tr>
<td>1725 State Street,</td>
</tr>
<tr>
<td>La Crosse, WI</td>
</tr>
<tr>
<td><strong>Options Clinic</strong></td>
</tr>
<tr>
<td>1201 Caledonia Street,</td>
</tr>
<tr>
<td>La Crosse, WI 54603</td>
</tr>
<tr>
<td><strong>La Crosse County Health Department</strong></td>
</tr>
<tr>
<td>300 4th Street North</td>
</tr>
<tr>
<td>La Crosse, WI 54601</td>
</tr>
</tbody>
</table>

| based on homogeneity | One homogeneous segment of the service population would be 18-25 year old females attending UW-La Crosse. If the program was tailored specifically to this homogeneous segment the females would be more responsive to the program. |
|---|

The poster campaign was conducted on campus at the University of Wisconsin La Crosse. Throughout the month of April we used posters to promote STI awareness in residential halls and event posters to promote the Safe Sex Scavenger Hunt which were placed in academic buildings.

The Safe Sex Scavenger Hunt took place downtown La Crosse on Friday, April 13th 2012. We had scavenger hunts available starting at 9:00pm which had to be returned before 12:00 midnight. Upon completion of the scavenger hunt participants were entered in a prize drawing which took place at 12:30am. The prize drawing a short message about awareness of STIs then concluded our program.

Planned activities for bar owners include condom machine installation, training session on STD awareness and a poster campaign. An installation of condom machines in the male and female restrooms of the willingly participating bars would promote condom use and hopefully diminish the negative stigma attached to condom preparedness. The condom machines would be available and readily accessible at all working hours of the bar, which would allow individuals to have a choice as to whether or not to practice safe sex. If we would like individuals to make healthy choices, then we need to give them the opportunity to make the healthy choice and one way we can do that is by providing them with condoms.
The second planned activity for bar owners is an education session about STI rates in La Crosse County and the effect of physical and social environments on the spread of STI’s. Bartenders will also be asked to encourage staff to wear a “Get Tested” button and provide patrons with free condoms during the first week in April to promote STI Awareness Month.

The poster campaign was conducted downtown La Crosse at the ten bars on third street that participated in the safe sex scavenger hunt. Starting in early April we began distributing posters to promote STI awareness and event posters to promote the Safe Sex Scavenger Hunt. These posters were placed strategically throughout the bars so they would be successful in sending positive, educational messages.

Planned activities for high school students include implementation of the Our Whole Lives (OWL) program, a poster campaign in the schools and a presentation by a representative from Options Clinic.

The OWL program is a comprehensive sex education curriculum that is already being taught all over the United States. Students would be provided with a letter outlining the curriculum for the OWL program and a sign up sheet that they would then be able to present to their parents. A letter to the parents would also be sent out, outlining all the previously mentioned information. This curriculum would be taught other Sunday during the full academic year and students would be fully educated on sexual health that aligns with their age group.

The poster campaign will be conducted in high schools in La Crosse County. Throughout the month of April we will use posters to promote STI awareness in the schools and provide students with resources to attain protective measures such as screenings, condoms and birth control.

A presentation will be delivered to all of the health classes directed towards 9th-12th grade students in La Crosse County high schools. The presentation will be given by Karolee from Options Clinic and will include a discussion on the risks of unprotected sex as well as the various methods of protective measures that can be used.

Evaluation design was tailored to each priority population segment and the activities implemented. The following are the evaluation designs for the activities actually implemented with college students aged 18-24 in La Crosse, WI.

**Objective 1:** College Students age 21-25 will become more comfortable discussing using protection during sexual activities by asking various individuals personal questions about sex and condom use during the Safe Sex Scavenger Hunt.

**Evaluation Plan:** Tell what data will indicate the achievement of this objective.

- Level of comfort discussing the use of protection during sexual activities with partner

Data would be collected using a survey of participants that would ask them to rate their level of comfort on a scale of 1 to 10, one being very uncomfortable and 10 being very comfortable. The data will be analyzed to see if there is a change in comfort level before and after the activities and the results would be summarized in a table that would show the change in comfort level. Data will be interpreted to show whether or not there was a change in comfort levels among participants in the activities. Interpretation will depend on data gathered and trends that appear. Evaluation reports will be given to the Campus Wellness Coordinator, Hall Directors, and the County Health Department. Each person will receive a
summary of findings on the level of comfort of participants with discussing the use of protection with their partners. The will receive the summary table that will visually show the change in comfort level. The report will be distributed on May 1st.

**Objective 2:** College Students age 21-25 will be able to name a location that provides free testing for STD’s by searching for and writing down the number for Options Clinic during the Safe Sex Scavenger Hunt.

**Evaluation Plan:** Tell what data will indicate the achievement of this objective.

- Knowledge of the name of a location that provides testing for STD’s

Participants will be asked to write out the name of a location where STD testing is provided. The number of participants who are able to name a location that provides testing will be divided by the total number of participants who respond and that fraction will be converted to a percentage that will signify the percent of people who are aware of and can name a location that provides STD testing after participating in the activities. We will interpret the data to understand the knowledge of participants. The percentage of participants who are able to name a location that provides STD testing indicate that that group of people is aware of where to get tested and would know how to find out more information about testing.

Options Clinic and the Aids Resource Center as well as the La Crosse County Health Department will receive the evaluation reports. Each location will receive the results, specifically the percentage of young adults who are aware of a location to receive STD testing. The report will be distributed on May 1st.

**Objective 3:** College Students are 21-25 will be able to name the most prevalent STD in La Crosse County by having to find, record and recite a statistic about the number of cases of Chlamydia is La Crosse County during the Safe Sex Scavenger Hunt.

**Evaluation Plan:** Tell what data will indicate the achievement of this objective.

- Participants will be asked to select the most prevalent STD in La Crosse County from a list of common STD’s.

Data was collected in a questionnaire that will be distributed post-activities. We analyzed the data to see how many participants are aware of the most prevalent STD in La Crosse County. If participants select an STD that is not the most prevalent (not chlamydia) their responses were be analyzed to uncover what is perceived to the most prevalent STD in La Crosse County. Data were interpreted to reveal whether or not young adults are aware that Chlamydia is the most prevalent STD in La Crosse County. Data will also be interpreted to find out what young adults believe is the most prevalent STD if they do not select the correct response of Chlamydia. If students select correctly this would indicate that they are aware of the high rates of Chlamydia and the risk associated with unprotected sex in La Crosse County. Options Clinic and the Aids Resource Center as well as the La Crosse County Health Department will receive the evaluation reports. Each location will receive the results, specifically the percentage of young adults who are aware of a location to receive STD testing. The report will be distributed on May 1st.

All participants that responded to the evaluation noted that Chlamydia is the most prevalent STD in La Crosse County and that condoms are the most effective way (besides abstinence) to prevent an STD. Also, all participants recognized that they were effective in raising
awareness of STDs by participating in the Safe Sex Scavenger Hunt. All, but 1 participant felt that they were at a 9 or 10 of comfort level for discussing the use of protection during sexual activities with a partner. The other participant felt as though their comfort level was at a 4. In addition we received a lot of positive feedback from participants that felt the Safe Sex Scavenger Hunt was successful. One participant even indicated, “I loved this program and I heard a lot of people talking about it downtown that were not previously informed of the program. It would be great if this program were done annually.” In addition people that did not participate took interest in our program by asking questions, wearing buttons, tee shirts, condom pins, and “get yourself tested” stickers. Many people who were curious took informational packets and were excited to talk to us.

In the allotted amount of time we were able to fulfill the college population activities which included the Chlamydia focus group, post campaign, and Safe Sex Scavenger Hunt. In addition we also were able to complete the poster campaign for the bars. Due to time and financial restraints we were not able to fulfill any other activities that revolved around the bars or high school population.

Discussion

Summary of the findings This project indicated a strong receptivity of combating the spread of Chlamydia on multiple levels. College students were very receptive to participating in the Safe Sex Scavenger Hunt and businesses and bar owners were very willing to promote STI Awareness Month and safe sex practices. By participating in the SSSH participants accomplished the three objectives of the program plan:

- College Students age 21-25 will become more comfortable discussing using protection during sexual activities by asking various individuals personal questions about sex and condom use during the Safe Sex Scavenger Hunt.
- College Students age 21-25 will be able to name a location that provides free testing for STD’s by searching for and writing down the number for Options Clinic during the Safe Sex Scavenger Hunt.
- College Students age 21-25 will be able to name the most prevalent STD in La Crosse County by having to find, record and recite a statistic about the number of cases of Chlamydia is La Crosse County during the Safe Sex Scavenger Hunt.

There were several limitations throughout the planning and implementation of this program. Time was the biggest limitation we encountered. Our time was limited to the length of the semester to plan, implement and evaluate our program. If we had more time we would have been able to expand the number of businesses involved and we would have been able to make more of an impact in terms of initiating condom machine installation in the bars. The second limitation was that we did not distribute a pre-survey to establish a baseline for evaluation. If this program were to be implemented again a baseline assessment to establish the starting knowledge, skills and self-efficacy of the participants would be highly recommended. Conflicting schedules were the final limiting factor in planning the program. We were faced with the challenge of juggling the schedules of not only our group members’ schedules, but with the schedule of Kate Lesnar at the La Crosse County Health Department. Meeting in person was often not an option, so a majority of our communication was done either via e-mail or over the phone.

We have demonstrated that the SSSH was effective in promoting STI Awareness Month and condom use. However, we are unsure what
the long-term effects of the program will be. The post-program evaluation indicated a high level of satisfaction with the program (see results section for more detailed evaluation analysis) and there is a potential for the program to be implemented annually.

Overall we learned that time management and having a flexible schedule and open mind are important to successful program planning. Also, remaining focused on specific goals and objectives is necessary for all steps in the program planning and implementation processes. Keeping these considerations in mind will help guide our health education efforts to be successful in the future.

References


Wisconsin Youth Sexual Behavior and Outcomes: 2000-2009 Update. Wisconsin Department of Health Services and Wisconsin Department of Public Instruction, April 2011

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Both of the following distinctive graduate programs will be of interest to the graduates in Community Health Education just after their graduation or following additional work experience. The graduate coursework (700-level) enables candidates from many different states and nations to experience unique cultural perspectives while learning advanced health skills from graduate faculty mentors.

The Master of Public Health (MPH) degree in Community Health Education was the first MPH program in the University of Wisconsin System. The program is designed to prepare professionals who will address quality of life enhancement through health education and health promotion, educational, policy, and partnership-based activity. The 44-45 credit program addresses advanced health education competencies, knowledge and concepts in community health education, public health standards, and many of the emerging content areas identified by the Institute of Medicine for the preparation of public health practitioners. The program has been offered since 1991, and nationally-accredited by the Council on Education for Public Health since 1992. It attracts candidates from throughout the world, and in 2004 the program was ranked 6th in the nation among all Graduate Community Health Programs by U.S. News and World Report. Two program tracks provide the candidates with a choice between conducting thesis research or developing a graduate project based upon a defined need. For additional information, contact the Program Director: Dr. Gary D. Gilmore at ggilmore@uw腋edu or call 608-785-8163.

The Master of Science in Community Health Education (MS-CHE) focuses on preparing the candidate for employment as a health educator and/or health promotion specialist in a health-related, educational, or community-based setting. This 43-credit program, offered since 1974, has its groundings in advanced health education and health promotion foundations, focused principles of research design and evaluation, and a community health practicum, leading into the development of a graduate project based on the candidate's area of interest and emerging expertise. Additional coursework is selected by the candidate (during scheduled advising sessions) in the areas of administration and program development, health education processes and concepts, and health content and skills. Coursework options are guided by the advanced-level competencies for health educators. This approach provides flexibility for the candidate to derive maximum benefit from the program based on assessed interests and needs. For additional information, contact the Program Director: Dr. Gary D. Gilmore at ggilmore@uw腋edu or call 608-785-8163.
Outback Steakhouse
Employee Wellness Program

Stephani Peterson, Laura Price, Brooke Rasmussen, Kathryn Walentoski, Jenna Willems all undergraduate candidates in Community Health Education at the University of Wisconsin-La Crosse.

Abstract: The Outback Bootcamp Program was a five week fitness program designed for Outback Steakhouse employees to increase their physical activity levels. Each weekly session included a fun recreational activity such as volleyball, kickball, bluff hiking, walking trails, and lacrosse. By the end of the program we anticipated that participants would have greater knowledge regarding exercise options and facilities available in the community. We hoped this would lead to a more permanent lifestyle change incorporating more physical activity into their daily routines. In addition, educational handouts were provided at each session addressing topics related to physical activity. The program was evaluated through pre- and post-assessments given to all interested participants. Overall, the program success was demonstrated through responses indicating positive behavior change and receptivity to the program.

Key Words: Employee wellness, wellness programs, physical activity, restaurant workers, obesity, sedentary lifestyle.

Introduction

“Today the United States faces a national public health crisis as Americans deal with rising chronic disease rates from risk factors like physical inactivity and unhealthy eating,” ("Pioneering healthier communities," 2011). Policy makers need to ensure that healthy choices are available, affordable, and easily obtained should individuals want to make healthy lifestyle changes. Public health approaches can reach large numbers of people in diverse settings, such as that of a workplace, and are needed to help people make healthier choices. Today the success of a company heavily depends on the work performance and productivity of its employees. The ability to function and perform at high levels on a consistent basis can be greatly impacted by employee wellness programs. The implementation of these programs has been successful not only for the employee but for the company as well. Wellness programs ensure that personal health is a priority. They focus on physical well-being and look after medical requirements. Programs that offer weight loss regimes, stress management and exercise, and diet and fitness advice can have a substantial impact on employees today, especially in times of rising obesity and inactivity levels (Lindahl, 2011).

The restaurant industry generates seven billion dollars every year. For every million dollars spent in the food industry in Wisconsin an additional 34 restaurant jobs are created thereby
employing one in every ten working Wisconsinites (Wisconsin Restaurant Association, 2011). Most employees in the restaurant industry are at high risk of injury and illness and are often provided with little or no benefits to help cope with these challenges. For an employee in a restaurant workplace, conditions can be demanding and stressful. This often times leads to a development of chronic pain and fatigue. Many restaurant employees report feelings of stiffness, pain, tightness, aching, or soreness in their legs, knees, and feet ("Burned: High risks," 2009). Employee wellness programs provide benefits to both employees and employers. Wellness programs cover a wide range of health issues, including exercise programs, nutritional counseling, and stress management to meet diverse employee needs. Work performance, loyalty, and responsibility can be maximized though the use of employee wellness programs. Employees are comforted knowing that their health and wellbeing are a priority consideration of their employers, which contributes to a pleasant and productive work environment. In addition, levels of absenteeism decrease along with reduced sick leave. Overall, wellness programs have also been shown to reduce high company costs of employee health care (Lindahl, 2011).

**Methods**

Genetic factors, physical/social environments, and behavioral factors all play a role in determining whether or not an individual will engage in regular physical activity. While genetic determinants of participation in physical activity do not exist, there are some genetic differences between individuals’ energy levels and after-effects of physical activity which contribute to participation levels. A study from the Medicine and Science in Sports and Exercise Journal found some similar genetic variations among people who were physically active. One gene in particular is thought to play a role in the body’s response to fatigue, implying that similar amounts of exercise may be more tiring and less appealing for certain individuals regardless of their fitness levels. Another gene affecting the muscles and brain is thought to have an impact on how physically easy or difficult exercise feels and how mentally rewarding exercise is (Reynolds, 2010).

The physical environments of individuals play a large role in physical inactivity. In the past few decades physical environments in our society have continued to change in a way that is less conducive to positive health and physical activity behaviors. Examples of changes in the environment that promote unhealthy habits include: the decline of physically demanding occupations, increase in labor saving devices and other technological innovations, increase in dependence of the automobile for personal travel, and an increase in the popularity of sedentary leisure activities such as movies, video games, and computer games (“Does the built environment,” 2005). The increase and consumption of processed, mass-produced, and fast food is another popular change we have seen in our physical environment that is negatively affecting health. Overall, we know physical environments have a direct impact on our amount of daily energy exertion and physical activity levels.

Similar to physical environments, social environments are strong determinants of physical inactivity. One aspect of social environments includes social relationships which individuals maintain. Social relationships can help or hinder an individual’s likelihood of adopting a particular health behavior, such as physical activity. If relationships are supportive they can increase physical activity levels thus promoting positive health and well-being. On the contrary, unsupportive relationships can act as barriers to physical activity. Socioeconomic status is another determinant of one’s health and health behaviors. As of May 2008, restaurant employees such as waiters and waitresses earned average hourly wages, including tips, of $8.01. Combining all food preparation and
serving employees, hourly wages averaged even less at $7.90 (Food and Beverage Serving and Related Workers, 2008). For those with low socioeconomic status in which individuals do not have the necessary financial means to participate in health programs or recreation facilities in the community, physical inactivity becomes more common. Lastly, neighborhood and community characteristics play a role in physical inactivity. These characteristics may consist of limited resources such as recreational facilities, walking paths, and parks, or feeling uncomfortable and/or unsafe in the community (Giles-Corti, 2002). Studies show that in neighborhoods where there is little trust among neighbors and high perceived or actual crime rate, physical activity occurs less often (“Neighborhoods play key role”, 2008).

There are several behavioral determinants influencing the activity levels of restaurant employees. These include: an interest in improving physical activity levels, regular consumption of healthy and nutrient-dense foods, and individuals with preexisting conditions or health concerns such as diabetes, cardiovascular disease, or obesity. Regular physical activity in conjunction with a balanced diet will provide sufficient energy for the body and decrease the risk of chronic diseases.

As stated by the Centers for Disease Control and Prevention, “Regular physical activity is important for good health, and it’s especially important if you’re trying to lose weight or to maintain a healthy weight” (CDC, 2011). Increasing physical activity for adults is validated in the leading causes of death seen in La Crosse County in 2009. In this year, diabetes and cardiovascular disease, two highly preventable and treatable diseases through physical activity, were two of the top five leading causes of death in this region (La Crosse County, Wisconsin Health Statistics, 2007). In La Crosse County, 16.3% of the population self-reported being inactive or getting no physical activity; a major contributor to overweight/obese conditions (“La Crosse Medical Health Science Consortium,” 2011). Although these statistics do not specifically pertain to the restaurant employee population in La Crosse County, restaurant employees do represent a significant portion of the population as a whole.

There have been many efforts to improve the health of the La Crosse community. These efforts include: programs that promote walking or biking to school or work, healthy vending options, and even provides people with the skills to be able to identify healthy food choices when eating out (La Crosse County Health Department, 2009). However, there are few programs in the area that promote health and wellness in the workplace. Implementing an employee fitness program with Outback Steakhouse Restaurant in Onalaska, Wisconsin will help to improve the health status of the people in La Crosse County, and more specifically, the employees of Outback Steakhouse.

This program included five consecutive weeks of physical activity, ranging from recreational activities, like sand volleyball, kickball, and lacrosse, to more practical exercises, like walking or hiking. These exercises helped to increase the physical strength needed for completion of tasks in the workplace and build stronger relationships among co-workers. In addition, flyers advertising the specific activity of the week, along with educational tip sheets addressing dehydration, stretching, proper attire, healthy snacking, and motivation, were displayed in the break room and common areas for employees to reference. These flyers helped to increase employees’ knowledge and motivation to attend the weekly sessions and assisted them in making healthier decisions on a regular basis. The program was offered free of charge for participants and required minimal monetary support for planning and implementation. Utilization of free community facilities and resources helped to keep costs low.
Incentives such as water bottles and t-shirts were provided to participating employees as encouragement. These were provided through in-kind support from the Outback Steakhouse manager, Bridget Dahm. Additionally, each participant was required to sign a release form, prior to participation; renouncing responsibility from Outback Steakhouse should personal injuries occur.

Sand volleyball, kickball, and lacrosse were planned recreational activities to engage participants in physical exercise in an enjoyable environment. Employees worked as a team to overcome obstacles while performing to their best ability and having fun. These activities fostered healthy competition, but also provided a fast pace and enjoyable experience that incorporated physical activity. The other two activities consisted of walking trails and hiking the bluffs in La Crosse. This group activity promoted physical exercise in a comfortable environment and no prior experience was necessary. Hiking and walking exercises provided an environment optimal for all skill levels while stimulating conversation that increased positive relationships between employees.

This program was also designed with two other priority segments in mind. These segments include fast food employees and restaurant owners/managers. The program for fast food employees closely aligns with the program designed for Outback Steakhouse employees. Nutrition education sessions would be held in addition to the physical activity sessions for this population segment. A different program approach would be taken to address restaurant owners and managers. This program would take the form of a conference held four times a year. The program would focus on the importance of worksite wellness programs and the array of benefits they can provide to employers and employees which include effects on health care costs, absenteeism, productivity, and morale.

Evaluation Design

The Outback Bootcamp Program was evaluated through an experimental design which included a pre-assessment and post-assessment. Prior to implementing the program, each interested employee was given an assessment. The pre-assessment measured current behaviors, barriers, and readiness to engage in physical activity on a regular basis. Additionally, the assessment requested activity interests of the employees in order to plan activities accordingly and maximize attendance levels. The post-assessment given to Outback employees after the completion of the program similarly measured the behavior change and likelihood of including physical activity into their daily routine. In addition, the post-assessment allowed for us to gain feedback from participants on the receptivity of the program as well as suggestions for improving future program implementation.

Results

Prior to the implementation of the Outback Bootcamp Program a pre-assessment was given to all interested participants; seventeen assessments were completed and returned. The results from this assessment provided us with helpful insights in planning the program. Activities were planned based off the assessment results indicating that the majority of respondents (65%) preferred to participate in “recreational sports or games.” In addition, 41% of respondents indicated an interest in “volleyball” while 35% of respondents indicated an interest in “kickball.” Other activities mentioned in the assessment included rock climbing, hiking, ropes course, swimming, walking. Exercise behaviors were also measured in the pre-assessment. Six respondents answered “often” when asked “Do you exercise currently?” An additional six respondents answered “sometimes” when asked the same question. Only four participants responded with
“rarely” and only one participant answered “always.”

After completion of the five-week fitness program, a post-assessment was given to all participants. Fifteen participant responses were completed and returned. This assessment measured behavior change, likelihood of including physical activity into their daily routine, and receptivity of the program. Positive feedback noted in the post-assessments demonstrated that 75% of participants were “very” or “somewhat satisfied” with the program and “strongly agree” or “agree” that the program positively affected their physical activity levels. A goal of our program was to introduce new and exciting activities at free community facilities. According to the post-assessment, 38% of respondents “strongly agree” and 38% “agree” that the program introduced new physical activity options and facilities into their exercise regimes. Through the post-assessments, we have gained insights on suggested activities for future implementation. Some of these activities include: softball, yoga, frisbee golf, canoeing, and some sort of obstacle course. Lastly through analysis of the post-assessments, it was found that 75% of respondents reported enjoying all activities when asked what their least favorite activity was.

Additional comments and suggestions offered by program participants:

“I liked the program because it got me up and going in the morning and made me feel good and productive the rest of the day”

“It was fun to build exercise outside of the gym”

“Have reminders for activities that we can take with us”

“Maybe offer it at different days or times so more people can come”

“I liked getting together to do different activities and had a lot of fun”

Discussion

If additional time was available, participants expressed an interest to continue the weekly program. If the Outback fitness program were to continue, we would provide weekly reminders in addition to those posted at the restaurant. Another adaptation would include changing the date/time of the weekly activity sessions, to increase participation rates. Additional research may be required to guide health professionals to better understand the health concerns related to physical inactivity and the restaurant employee population segment. Limited research is available regarding this specific population segment and its related health concerns. In order for effective programming to occur, data reflective of the target population will be most useful in program design. Through the programming process we have gained many insights. Including the target population in the programming planning and design process is key for a successful program. Another insight gained includes continuous evaluation of program progress so that changes can be made to accommodate the most current needs of program participants. Lastly, with voluntary participation, attendance rates may vary and can largely influence the success of the planned activity.

Acknowledgements

The authors would like to thank Outback Steakhouse Restaurant in Onalaska, Wisconsin, Bridget Dahm, the restaurant manager for her collaboration and interest in this program. Her support contributed to the success and receptivity of the program.
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