## **Breast Self-examination for Visually Impaired Women**

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The proposal by Ms. Albright and Ms. Toy won first prize in the contest for the 1992 Secretary's Award for Innovations in Health Promotion and Disease Prevention. The contest is sponsored by the Department of Health and Human Services and administered by the Health Resources and Services Administration, in cooperation with the Federation of Associations of Schools of the Health Professions. The authors were students of nursing at York College of Pennsylvania.

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Synopsis .....

Regularly practiced breast self-examination (BSE) has been demonstrated to be an effective method in the early detection of breast abnormalities. Women are becoming increasingly aware of the importance

of BSE as a means of self-health care and are seeking instruction on how to perform such examinations properly. Unfortunately, not all women have equal access to BSE instruction. This project addresses the need for BSE instruction specifically tailored to meet the needs of visually impaired women. A review of existing sources revealed that no formal methods of BSE instruction are being used to meet the needs of this population.

The participants in this study included 20 women between the ages of 30 and 75 years, all of whom are partially sighted or legally blind. The women participate in life skills classes on a regular basis at a county association for the blind. The authors conducted an instructional seminar demonstrating BSE and used methods which focus on the senses of touch and hearing. According to the authors, the instructional seminar can result in an increased self-awareness of the importance of BSE and help to meet the unique needs of the visually impaired women.

Cancer of the Breast is the most frequently diagnosed malignancy in women and is second only to lung cancer as a cause of death of women (1). It is estimated that one in nine women will develop breast cancer. Instructional information on breast self-examination (BSE) is readily available to women through the American Cancer Society and other health care organizations. Much of the instructional information currently is conveyed in printed pamphlets, videos, and slides.

However, one segment of the population that is underserved by these methods is the community of visually impaired women. According to current statistics of the American Foundation for the Blind, there are approximately 2 million women over the age of 18 years in the United States who are severely visually impaired. Through inquiries to the American Cancer Society, the American Foundation for the Blind, several State governmental agencies, and several community health care organizations, we ascertained that there were no instructional materials on BSE geared toward visually impaired women.

Instructional material for the self-examination of

the breast currently in use does not meet the health care needs of the visually impaired woman.

#### Literature Review

Breast cancer is second only to lung cancer as a cause of cancer deaths among women (1). The incidence of breast cancer in the United States rises with age, although women in all age groups suffer from breast cancer. The cause of breast cancer remains a mystery; however, studies suggest that genetic factors, hormonal imbalances, and environmental factors increase the risks for the incidence of breast cancer (2). Even though family history is the most important risk factor for women, only 10 percent of women with breast cancer have a mother or sister with the disease. Seventy-five percent of women with breast cancer have no family history of the condition (3).

Currently, there is no way to prevent breast cancer from occurring. Early detection, a form of secondary prevention, is still the best means of maintaining women's health; the 5-year survival rate is 90 percent (4). The U.S. Preventive Task

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Force recommends three screening tests for the detection of breast cancer: clinical examination, mammography, and breast self-examination (5). It is estimated that 75 to 90 percent of all breast cancers are found, not by clinical examination or mammography, but by the woman herself (1). Since most tumors are detected by women themselves, routine breast self-examinations can lead to earlier detection of abnormalities and a more positive prognosis (6). The American Cancer Society has recommended breast self-examinations as a safe, low-cost, and noninvasive self-screening test (1).

The National Cancer Institute has concluded that most women are aware of the need to perform breast self-examination, but only 24 percent of all women perform monthly examinations (7). Breast cancer is a serious health risk for women and, with the potential effectiveness of early detection by breast self-examination, every woman should be offered breast self-examination instruction (1).

Health care providers are in an ideal role to promote, instruct, and evaluate breast self-examination among all women. It has been demonstrated that the sensitivity of breast self-examination can be improved by providing guided instruction to women (5). Due to the variety and complexity of predisposing factors to breast cancer, the health care providers must assess each individual or group to determine their level of knowledge, their attitudes, and their perceptions of breast self-examinations. It is from this assessment that various strategies can be formulated and implemented to meet the needs of the individual or group (4).

#### **Project Objectives**

To address the needs of visually impaired women by providing instruction in the self-examination of their breasts and to promote the value of such examination as a means of early cancer detection, the authors set the following objectives:

- to make health care information accessible to visually impaired women,
- to design a method of teaching visually impaired women breast self-examination which takes into consideration their unique method of assimilating information.
- to introduce new methods for teaching breast self-examination that can eventually be implemented nationwide.
- to teach visually impaired women how to perform breast self-examination.
- to increase body self-awareness through the use of touch when teaching breast self-examination, and
- to heighten their self-esteem by empowering visually impaired women to take an active role in the early detection of breast cancer.

#### **Methodology**

Assaf and coworkers (8) compared three training methods for the instruction of breast self-examination: pamphlets only, video and pamphlets, and the use of breast models and pamphlets, to determine the best method of teaching breast self-examination. The researchers concluded that training using breast models and pamphlets yielded better results than the other methods. The study did not, however, address any method(s) that would meet the needs of visually impaired women. In addition, we found no reports of studies that included visually impaired women.

For this project we plan to employ the following methods:

- Revise the American Cancer Society's current standards for breast self-examination to incorporate the needs of the visually impaired women and produce them in Braille and large print,
- Produce and provide to each woman at the seminar an audiotape recording of BSE for her use at home.
- Provide instructor-guided BSE instruction to each woman using Mammocare Breast Models,
- Provide positive reinforcement when women are able to locate lumps.

### **Piloting the Project**

The project was piloted with 20 women who were clients of the Tri-County Association for the

Blind, living in Dauphin, Cumberland, and Perry Counties, PA. The seminar was held at the Association's premises in Harrisburg, PA, as one of the regularly scheduled life skills classes. After hearing from State agency representatives about the importance of early detection of breast cancer, the teaching began.

Each woman was provided with a demonstration breast model, and the women were taught how to use their sense of touch to apply different degrees of pressure at each site to check for lumps. Instructors gave detailed directions and checked each woman's technique. Once the women were comfortable with the technique, they were asked to find the lumps in the breast models and mark them with stickers. After several opportunities to use the technique, the women were able to find at least four of the five lumps. At the end of the 4-hour session, each visually impaired participant was given a Braille pamphlet and an audiotape to take home.

#### Significance of Project

The significance of this project is its frank approach to addressing the needs of visually impaired women by providing new instructional techniques for breast self-examination.

By implementing new training techniques, we anticipate that visually impaired women will gain increased self-confidence, heightened self-awareness, and increased individual proficiency in breast self-examination.

In response to our inquiries, neither the American Cancer Society nor the American Foundation for the Blind could supply instructional material that took into consideration the health care needs of visually impaired women relative to breast self-examination. The incorporation of information in Braille, production of audiotape recordings, and the hands-on use of breast models to instruct impaired women are innovative features of this project. To our knowledge, no formal instruction in BSE has ever been proposed or implemented which specifically meets the unique needs of visually impaired women.

#### **Summary of Evaluation Methods**

To judge the effectiveness and success of the teaching program, we will employ the following methods of evaluation:

• Evaluate the ability of each participant to locate the lumps within the Mammocare Breast Models,

- Have the participants repeat the demonstration of the most effective means of palpating the breast to locate lumps.
- Elicit feedback from participants on the usefulness and comprehensiveness of the audiotape on BSE.
- Elicit feedback from participants on the usefulness of the Braille pamphlet, and
- Conduct a telephone interview with each participant, if possible, after 3 months to appraise the adequacy of the program and answer the participant's questions.

#### **Budget Summary and Justification**

We propose to implement a pilot project in the State of Pennsylvania to gather information relative to the feasibility of conducting such training sessions nationwide. All costs and expenses are included in this budget summary, including one-time costs of procuring breast models for conducting the training for visually impaired women. Costs such as slide presentations and videos associated with training sighted women are eliminated when working with this target population. We will use Mammocare Breast Models which are available from Mamma Tech, Gainesville, FL.

| Fixed costs  | An  | nount  |
|--|-----|--------|
| 2 Mammocare Training Breast Models, \$200 each<br>20 Mammocare Demonstration Breast Models, \$30 | \$4 | 00.00  |
| each   | \$6 | 500.00 |
| 2 trainers per 4-hour session, \$20 per hour per   |     |        |
| trainer  | \$1 | 60.00  |
| Travel to site (for a 75-mile round trip at \$0.25   |     |        |
| per mile)  | \$  | 18.75  |
| 1 hotel room per trainer if site is more than 75   |     |        |
| miles from Harrisburg, PA  | \$1 | 20.00  |
| Miscellaneous office supplies used per session  Costs per participant                            | \$  | 10.00  |
| Informational pamphlet produced in Braille   | \$  | 5.00   |
| Shower Breast Model used to remind woman to  |     |        |
| perform monthly BSE  | \$  | 5.00   |
| Audiotape recording of how to perform BSE  | \$  | 3.00   |
| Carrying folder to hold instructional materials  | \$  | 2.00   |

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# Teen Peer Outreach-Street Work Project: HIV Prevention Education for Runaway and Homeless Youth

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Mr. Podschun is a student at the College of Health and Human Services, San Diego State University, San Diego, CA. His proposal was tied for second place in the 1992 Secretary's Award for Innovations in Health Promotion and Disease Prevention competition. The contest is sponsored by the Department of Health and Human Services and administered by the Health Resources and Services Administration of the Public Health Service in cooperation with the Federation of Associations of Schools of the Health Professions. The entry was submitted by the College of Health and Human Services, San Diego State University.

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### Synopsis .....

Each year, there are approximately 2 million homeless and runaway youths in the United States. On any given night, there are 1,000 homeless youngsters living on the streets of San Diego, CA.

Homeless young people are commonly involved in one or more of the following activities that place them at risk for HIV infection—unprotected sexual intercourse, needle-sharing in the use of injectable drugs, sex with someone who injects drugs.

The Teen Peer Outreach-Street Work Project trains teen peer educators to work in three existing San Diego youth service programs with street outreach staff members to provide HIV prevention education and referral services to San Diego's homeless youth. Selected teens from the target population also participate in street-based case management that provides skill development to bring about behavioral and attitudinal changes.

An HIV outreach program cannot stand alone and is most successful if it is integrated with services that meet the basic needs of its clients. In the three participating youth service programs of the Teen Peer Outreach-Street Work Project, food, clothes, and shelter information are provided. There are shelters in two of the three programs that become places where HIV educational messages, delivered on the street, can be reinforced. Immediate and concrete assistance can be offered to homeless youth.

Low literacy among the target population presents a significant obstacle to adequate and appropriate HIV prevention education for homeless youth. Currently, education materials that specifically target homeless youth do not exist. The outreach street project is being expanded to develop materials for homeless youth with low literacy levels. Teen peers will be used to facilitate structured focus groups composed of members of the target population. Focus groups will be used in concept development, product development, and evaluation of draft products.

Because the project is unique in San Diego, it addresses an unmet need, reaching a population often missed by traditional HIV education efforts.

THERE ARE APPROXIMATELY 2 MILLION homeless and runaway youths in the United States (1). The San Diego County Grand Jury estimates that, on any given night, there are 1,000 homeless adolescents in San Diego, CA (2). Homeless young people are commonly involved in such activities that place them at risk for HIV infection as

unprotected sexual intercourse, needle-sharing in the use of injectable drugs, or unprotected sex with a needle-sharing partner.

As of May 31, 1991, there were 691 cases of AIDS among teenagers (ages 13-19) reported to the Centers for Disease Control and Prevention (CDC) (3). Of all persons reported with AIDS, however,