BREAST AND CERVICAL HEALTH AWARENESS PROJECT:

DISSEMINATION OF INFORMATION

TO OLDER RURAL WOMEN

by

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APPROVAL

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This project has been read by each member of the graduate committee and has been found to be satisfactory regarding content, English usage, format, citations, bibliographic style, and consistency, and is ready for submission to the College of Graduate Studies.

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ABSTRACT

Breast and cervical cancer are significant public health problems. Incidence rates for both breast and cervical cancer increase with age. Coupled with the increasing numbers of older women in American society, this highlights the need for increased health promotion and disease prevention. Increasing breast and cervical cancer screening levels of older women to that of the national *Healthy People 2000* goals should be addressed by health professionals.

This project was undertaken to increase older rural women's awareness of the importance of cancer screening. Early detection and prompt treatment are the keys to reducing mortality from both breast and cervical cancers. Implementation of the project was conducted in three phases. Phase I included an extensive literature review and conducting a focus group.

Information obtained from the focus group was used in the development of educational strategies, Phase II. Insight was gained through the focus group about preferred educational strategies including the use of videos depicting older women, colorful posters, and pamphlets that were short and easy to read. Educational materials were also selected based on information derived from the Health Belief Model, which was also the project's conceptual framework.

Phase III was the delivery of information at a rural county fair. Few older women visited the county fair booth, thus it was difficult to measure the effectiveness of this educational format. One can speculate that older women didn't stop due to the sensitive nature of breast and cervical health information.

Despite the limitations, this project has implications for the delivery of breast and cervical cancer screening to older rural women. Focus group members reported they would like to receive information from their health care provider. It is important for health care providers to give cancer screening information to older rural women in their practices, but also devise methods to provide information to women who do not have a health care provider or obtain routine screening. These women are at greater risk of increased breast and cervical cancer mortality due to undetected cancers or delayed treatment. Overall, the greatest insight into targeting older rural women for breast and cervical cancer screening awareness were gained through the focus group.

CHAPTER 1

INTRODUCTION

Breast and cervical cancer are significant public health problems. In 1996, an estimated 44,560 U.S. women died from breast cancer and an estimated 4,900 women died from cervical cancer (National Cancer Institute [NCI], 1996a, NCI, 1996b). Over half a million American women will lose their lives this decade from breast and cervical cancers (The Centers for Disease Control and Prevention [CDC], 1992a). Breast cancer is second only to lung cancer as a leading cause of cancer mortality in women (Sinkeo, Osuch, Garlinghouse, Rakowski, & Given, 1996). There were 590 reported cases of malignant breast cancer and 45 cases of malignant cervical cancer among Montana women in 1993 (Montana Central Tumor Registry, 1996). The statistics in this paragraph are particularly distressing in light of the statement from the *1992 CDC Progress Report to Congress* (CDC, 1992b) that "virtually all deaths from cervical cancer and more than 30 percent of deaths from breast cancer could be prevented through the widespread use of screening mammography and Papanicolaou testing" (p.2).

Clearly, prevention of the development of both breast and cervical cancer should be addressed by health professionals. Prevention, in the form of early detection, can be achieved through intervention programs aimed at halting or reversing the process of pathological changes as early as possible (Valanis, 1992). Screening procedures may significantly improve the prognosis of women who are diagnosed with breast or cervical cancer.

Purpose

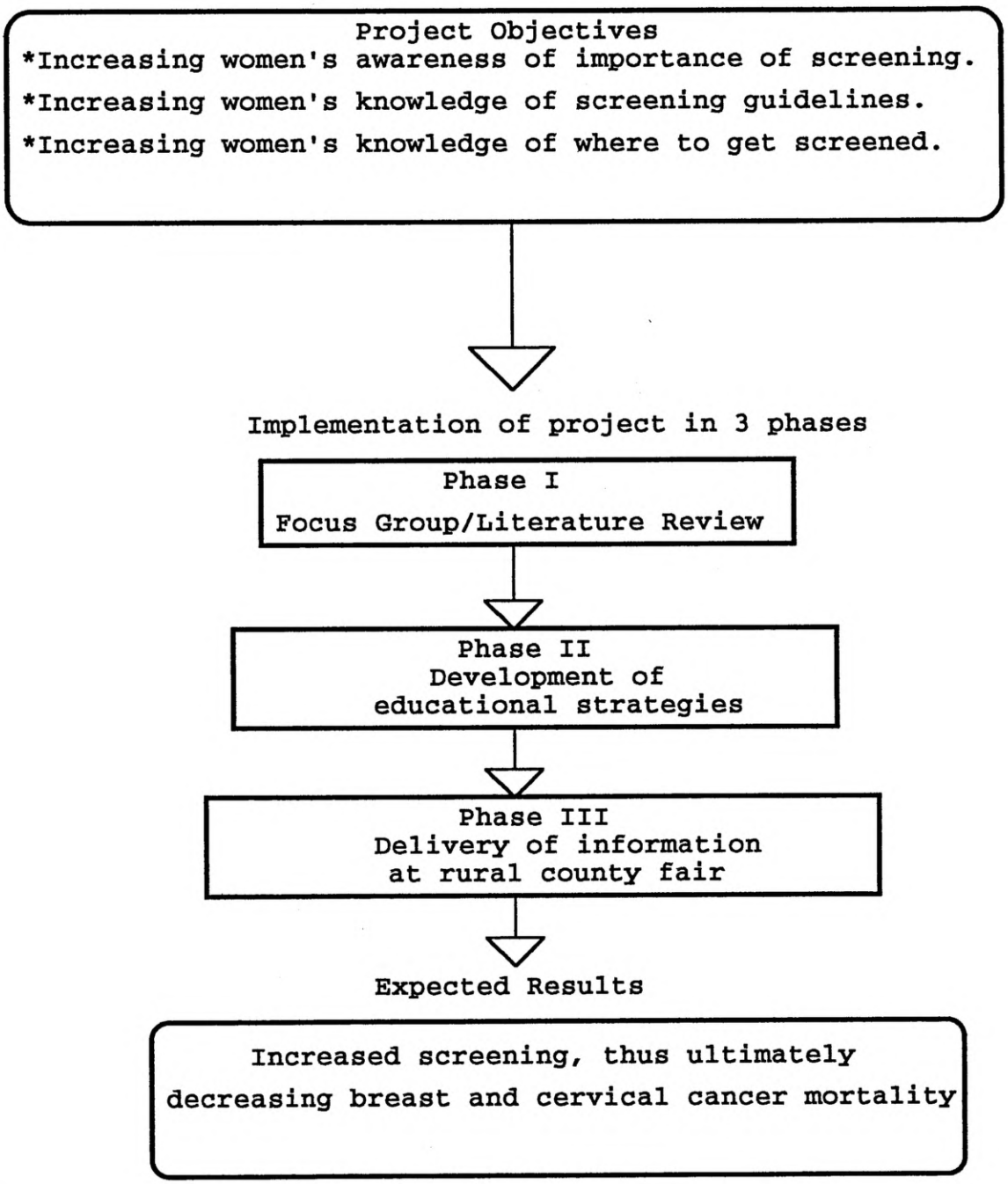
The general purpose of this professional project was to educate and increase older rural women's knowledge and awareness regarding the importance of obtaining breast and cervical cancer screening exams. The increased knowledge and awareness of older rural women was expected to lead to increased efforts by women to obtain screening, thus ultimately decreasing breast and cervical cancer mortality.

According to the *National Strategic Plan for the Early Detection and Control of Breast and Cervical Cancers* (CDC, 1992a) public education is an essential component in achieving higher levels of breast and cervical cancer screening. Following the guidelines of the CDC, specific project objectives included:

1. Increasing women's awareness of importance of screening.
2. Increasing women's knowledge of screening guidelines.
3. Increasing women's knowledge of where to get screened.

This professional project was conducted in essentially three phases in order to meet the above objectives. Phase I included (a) facilitation of a focus group consisting of older rural women, and (b) completion of a literature review relevant to breast and cervical cancer screening. Both of these activities produced data and insights that were used for the development of educational strategies. Phase II was the development of educational strategies including: (a) selection of pamphlets, posters, and videos; and (b) construction of poster presentation. Phase III was the delivery and presentation of breast and cervical cancer screening information at a rural county fair in Bozeman, Montana (see Figure 1).

Figure 1. Overview of Professional Project.



Problem Statement

Early detection and prompt treatment are the keys to reducing mortality from both breast and cervical cancers (CDC, 1992a). Prognosis for recovery, from breast or cervical cancer, is inversely related to the stage of disease at the time of discovery (Leslie, 1994). The relative survival rate is commonly used to measure progress in the early detection and treatment of cancer (American Cancer Society [ACS], 1995). The number of years of survival increase with decreased cancer stage at diagnosis, e.g., greater number of years of survival with a stage I cancer diagnosis than stage 4 diagnosis.

Early detection strategies for breast cancer recommended by ACS in 1995 included (a) screening mammogram by age 40 for asymptomatic women, (b) mammogram every 1-2 years for women age 40 to 49, (c) mammogram every year for women age 50 and over, (d) clinical physical examination of the breast every 3 years for women 20 to 40, (e) clinical breast examination every year for those over 40, and (f) monthly breast self-examination (BSE) for women 20 years or older.

There is evidence that early treatment following screening by clinical breast exam and/or mammography is associated with reduced breast cancer mortality (O'Malley & Fletcher, 1987). Screening mammography has been shown to reduce mortality by 20% to 39% among women aged 50 years or older (Kerlikowske et al., 1993). However, in regard to BSE there are no controlled prospective trials that link performance of BSE to lives saved from breast cancer (O'Malley & Fletcher, 1987). Many unanswered questions remain regarding the benefit of BSE in reducing breast cancer mortality.

The ACS recommendations for early detection of cervical cancer include an annual Pap test with a pelvic examination in women who are, or have been, sexually active or who have reached age 18 years. A decrease in mortality subsequent to cytological

screening (i.e., Pap smear) for cervical abnormalities has been demonstrated in multiple, broad-based population studies (NCI, 1996).

Despite the availability of reliable screening methods for the early detection of breast cancer, utilization of these methods remains low (Owen & Long, 1996; Sparks, Ragheb, Given, & Swanson, 1996; Fiorica, 1996; Crooks & Neutens, 1993). Many women are unsuccessful in practicing preventive health behaviors due to barriers related to knowledge and beliefs. For example, women may falsely believe their chances of developing breast cancer are minimal if they have no family history of breast cancer. It is important to recognize that 75 percent of women diagnosed with breast cancer have no known risks other than age and gender, which are non-modifiable risk factors (American Medical Women's Association workshop, 1996). Champion (1995) found that women must first believe they are susceptible to breast cancer before they are motivated to action.

Additionally, a significant number of women are not being screened for cervical cancer (Harlan, Bernstein, & Kessler, 1991). Lack of fear of the consequences of a Pap test has been cited as an important predictor of obtaining cervical smears (Murray & McMillan, 1993). In light of these data, health promotion strategies that encourage the use of screening for breast and cervical cancer have the potential of decreasing mortality associated with these cancers.

Conceptual Framework

The Health Belief Model (HBM), originally developed by Hochbaum, Leventhal, Kegeles, and Rosenstock in the 1950's (Rosenstock, 1974), was chosen as the conceptual framework for this project. The HBM is a paradigm that has been utilized by numerous health researchers to analyze factors that contribute to an individual's perceived state of health or risk of disease (Edelman & Mandle, 1994). This model also examines an individual's probability of taking appropriate health care actions (i.e., a person's motivation

to engage or not engage in health activities). Data have supported the benefits of using the HBM in understanding preventive health behavior (Janz & Becker, 1984).

Major components of the HBM include: (a) perceived susceptibility to a disease; (b) perceived seriousness of a disease; (c) modifying factors; (d) perceived benefits of preventive action; (e) perceived barriers to preventive action; (f) cues to action; and (g) self-efficacy (Brown & Williams, 1994). These components as well as advantages and limitations of the HBM are discussed in Chapter 2, Review of Literature. For the purposes of this professional project, the HBM was used as a framework/guide to the selection of effective educational strategies. These strategies were designed to augment women's health knowledge, skills, and awareness regarding breast and cervical cancer, in order to bring about a change in their health behavior.

Definitions

A definition section is included to provide the reader with operational definitions of terminology used in this professional paper:

Older women. Women 50 years of age or older.

Rural areas. Counties not designated as metropolitan statistical areas (MSAs). MSAs include counties encompassing at least one city of at least 50,000 population or an urbanized area of at least 50,000 with a total metropolitan population of at least 100,000 (Hewitt, 1993).

Focus group. The use of small group interaction, guided by a moderator, to produce data and insights that would be less accessible without the interaction found in a group.

Health promotion. An attempt to improve the health status of an individual or community, and a concern with the prevention of disease. Health education through information-

giving, advice, support and skills training is part of, and a necessary prerequisite to, health promotion; health education attempts to raise awareness of the issue in question and fosters an ability to cope with illness or disease (Maben & Clark, 1995).

Primary prevention. Primary prevention aims to intervene before pathological changes have begun and seeks to eliminate or reduce host susceptibility. Primary prevention is accomplished through two types of activities: general health promotion and specific protection (Valanis, 1992).

Secondary prevention. Secondary prevention seeks to detect disease early, treat promptly, and cure disease at its earliest stage. Screening is the most common form of secondary prevention (Valanis, 1992).

Tertiary prevention. Tertiary prevention strives to limit disability through rehabilitation retraining for maximum use of remaining capacities of those persons for whom residual damage already exists (Valanis, 1992).

Breast self-examination. A method for detecting an abnormality of the breasts. The procedure is recommended to be performed systematically on a monthly basis by women 20 years of age and older. The technique includes four to six steps which require 10-15 minutes.

Clinical breast exam. A breast exam performed by a health care provider and recommended every 3 years for women ages 20 to 40 and then yearly thereafter.

Mammography. The process of taking an x-ray picture of the internal structure of the breast; a mammogram is the x-ray film image itself. Usually, two views of each breast are taken, one from the side and one from above. Recommended yearly for asymptomatic women age 50 and older for the purpose of detecting breast lesions when they are small, nonpalpable, and potentially curable.

Papanicolaou smear. A screening tool that detects precancerous and cancerous conditions of the cervix. Pap smears and pelvic examinations are recommended annually for women who are sexually active or who have reached age 18 years.

Sensitivity. The ability of a screening procedure to give a positive finding when the person being screened has a disease.

Specificity. The ability of a screening procedure to give a negative finding when the person being screened does not have a disease.

CHAPTER 2

LITERATURE REVIEW

The purpose of this project was to educate and increase older rural women's knowledge and awareness regarding the importance of breast and cervical cancer detection/screening. The specific project objectives included providing information to women to (a) increase their awareness of importance of screening, (b) increase their knowledge of cancer screening guidelines, and (c) increase their knowledge of where to get screened.

First, national and state (Montana) epidemiologic data, including risk factors, for breast and cervical cancer were reviewed. Second, literature pertaining to levels of prevention was reviewed. Third, breast and cervical cancer screening objectives and methods were examined. Fourth, a review of relevant literature pertaining to focus groups was addressed. Fifth, literature describing the target population, older rural women, was reviewed. Additionally, the health behaviors, beliefs, and practices of older women related to breast and cervical cancer screening were examined. Finally, a review of relevant literature pertaining to the conceptual framework, Health Belief Model, was included.

Scope of the Problem

Breast Cancer Statistics

The current estimate in the U. S. is that one woman in eight will develop breast cancer during her lifetime (NCI, 1996a). The NCI further reports that in 1996 there were 185,700 expected new cases of breast cancer in U.S. women. There were approximately

1,400 new cases in men. In 1996, approximately 44,560 U.S. women died from breast cancer.

From 1977 to 1997 breast cancer diagnoses increased about 2 percent each year. However, since 1987 the number of new breast cancer cases has reached a plateau or decreased slightly. In 1996 the overall 5-year relative survival for breast cancer was 75 percent (CancerNet, 1996). Specifically, 93 of 100 women diagnosed with localized breast cancer, 71 of 100 women whose diagnoses included regional spreading of the cancer, and 18 of 100 women whose diagnoses involved distant metastases will be alive five years from now.

In U.S. women between the ages of 40 and 49, breast cancer is the leading cause of death (Fiorica, 1996). The National Cancer Institute's current guidelines do not recommend routine mammograms for this age group. However, the American Cancer Society continues to recommend mammograms every 1-2 years for women age 40 to 49. It is somewhat distressing that the current controversy exists regarding the efficacy of screening mammography for women age 40 to 49 years.

The incidence of breast cancer in U.S. women rises with age through the eighth decade (Costanza et al., 1992). Specifically, Costanza et al. found that women 65 years of age and older represent 14 percent of the female population but account for 43 percent of invasive breast cancer. Many women do not realize the extent of the rising risk of breast cancer in older women. The incidence rate of breast cancer according to age in U.S. women is shown in Table 1. The data shown in Table 1 come from the Surveillance, Epidemiology and End Results (SEER) Program from the years 1984-1988 (Costanza et al.). The numerical value of the rate expressed as cases per person-year on Table 1 is approximately equal to the one-year probability of having a new diagnosis of breast cancer.

Table 1. Age and Incidence of Breast Cancer in U.S. Women

Age Group	Cases/100,000 Person-Years
25-29 yrs	7.4
30-34 yrs	26.7
35-39 yrs	66.2
40-44 yrs	129.4
45-49 yrs	159.4
50-54 yrs	220.0
55-59 yrs	261.6
60-64 yrs	330.7
65-69 yrs	390.7
70-74 yrs	421.8
75-79 yrs	461.4
80-84 yrs	451.3
85 yrs and >	411.9

Source: Data from the Surveillance, Epidemiology and End Results (SEER) Program (1984-1988).

The most recent data for Montana women diagnosed with malignant breast cancer indicated a total of 590 cases in 1993 (Montana Central Tumor Registry, 1996). The age breakdown and number of cases in each age group is presented in Table 2. The crude-incidence rate was 1.39 per 1000. the age-adjusted incidence rate was 1.02 per 1000.

Table 2. Montana Breast Cancer Data 1993.

Age Group	Number of Cases (n=590)
25-34 yrs	8
35-44 yrs	58
45-54 yrs	109
55-64 yrs	114
65-74 yrs	162
75-84 yrs	112
85 yrs and >	27

Cervical Cancer Statistics

In the U.S., an estimated 15,700 new cases of cervical cancer are expected to occur in 1996, with about 4,900 women dying from the disease (NCI, 1996b). An additional 600,000 women are diagnosed yearly with premalignant changes referred to as squamous intraepithelial lesion or cervical intraepithelial neoplasia (NCI). These premalignant changes have significant implications due to their ability to persist, regress, or progress rapidly to an invasive malignancy (NCI).

The incidence and mortality rates of invasive cervical cancer fell by more than 70% from 1950 to 1970 (NCI, 1996b). However, similar to the reported findings in breast cancer incidence, the rates of cervical cancer incidence appear to be decreasing more slowly since the early 1980s. Cervical cancer survival data show that survival appears to be directly related to the stage of disease at diagnosis. The 5-year relative survival rate is 88% for women with an initial diagnosis of localized disease. The survival rate is only 13% for women initially diagnosed with distant disease (NCI).

Cervical cancer statistics in older women warrant special attention. Incidence and mortality rates of invasive cervical cancer increase with advancing age, particularly in black women (NCI, 1996b). While just over 25 percent of the total number of invasive cervical cancers occur in women older than 65, 40 to 50 percent of all women who die from cervical cancer are over 65 years of age (NCI; Mandelblatt, Gopaul, & Wistreich, 1986).

The most recent data for Montana women diagnosed with malignant cervical cancer was a total of 45 cases in 1993 (Montana Central Tumor Registry, 1996). The breakdown in number of cases per age group are presented in Table 3. The crude-incidence rate was 0.11 per 1,000 and the age-adjusted rate was 0.09 per 1,000.

Table 3. Montana Cervical Cancer Data 1993.

Age Groups	Number of Cases (n=45)
15-24 yrs	2
25-34 yrs	6
35-44 yrs	6
45-54 yrs	9
55-64 yrs	7
65-74 yrs	7
75-84 yrs	8
85 yrs and >	0

Breast Cancer Risk Factors

Identifying women who are at risk for developing breast cancer should be a priority in offering preventive services. Known risk factors include age, female gender, family history (first-degree female relative with breast cancer), reproductive history, benign breast pathology, and previous breast cancer (Fiorica, 1996). Other accepted risk factors include upper socioeconomic status, obesity, and residing in U.S./Western countries (Leslie, 1994).

The vast majority of breast cancer studies state age and female gender as the major risk factors associated with the development of breast cancer (NCI, 1996a; Fiorica, 1996; Sinkeo et al., 1996; Kopans, 1992; Mor, Pacala, & Rakowski, 1992). Nevertheless, many women remain uninformed about the risk of breast cancer with increasing age. One study of women age 65 and older, found that 94 percent of the subjects at baseline did not know the risk of breast cancer increases with age (Rimer, Ross, et al., 1992).

A family history of breast cancer is another widely recognized risk factor. Fiorica (1996) stated that approximately 5 to 8 percent of all breast cancers occur in families with autosomal dominant transmission of breast cancers associated with highly penetrant

susceptibility alleles. For example, the BRCA1 gene, located on chromosome 17q21, is responsible for most cases of hereditary early-onset breast cancer. Women who are carriers of the BRCA1 mutation have a 60 percent risk of developing breast cancer by age 50, and an 85 percent lifetime risk of developing this disease by age 80 (Fitzgerald, MacDonald, & Krainer, 1996; Ford, Easton, & Bishop, 1994).

In regards to reproductive risk factors, Fiorica (1996) stated that menarche before the age of 14 years and menopause after the age 55 are both associated with relative risk factors of 1.1 and 2.0, respectively. Fiorica further stated that pregnancy history can influence a woman's relative risk of developing breast cancer. Nulliparity and first birth after age 30 have relative risks of 3.0 and 1.9, respectively.

Benign breast disease, including proliferative changes with atypical hyperplasia and complex fibroadenomas, has been associated with an increased relative risk for developing breast cancer (Fiorica, 1996). Additionally, women with previously diagnosed breast cancer have a 7 to 20 percent risk of developing a second primary contralateral breast cancer.

The NCI (1996c) reported excess breast cancer risk associated with a variety of exposures including: (a) fluoroscopy for tuberculosis; (b) radiation treatments for acne, tinea, thymic enlargement, postpartum mastitis, or Hodgkin's disease; and (c) exposure to organochlorine residues in the environment such as those from insecticides. Low-fat diets, vitamins C and E, carotenoids, and lactation have recently been studied as protective factors that may limit breast cancer (Fiorica, 1996; Prentice, Thompson, & Clifford, 1990). Alcohol intake and hormone-replacement therapy have been linked to an increased breast cancer risk. Further research is required in these areas.

Cervical Cancer Risk Factors

Cervical cancer has numerous well-established epidemiological risk factors, such as multiple sex partners, early age at first intercourse (16 years or younger), a history of

genital human papillomavirus (HPV) infection or other sexually transmitted disease, the presence of other genital tract neoplasia, prior squamous intraepithelial lesion, and being a minority, including African American, Native American, and Hispanic (Jones et al., 1990, Slaterry, Overall, & Abbott, 1989; Ley et al., 1991). Interval since last Pap smear (relative risk for > 10-year interval versus 0 to 2 year interval = 4.1) has also been reported as predictive of risk of in situ disease (Jones et al.).

Other possible risk factors associated with cervical cancer include smoking, diet, multiparity, being immunocompromised, history of radiation to the pelvis, long-term use of oral contraceptives, and non-use of barrier contraceptives or spermicides (Ley et al., 1991; Leslie, 1995; NCI, 1996d). Presently, there is no evidence of a familial tendency for cervical cancer (Leslie).

Levels of Prevention

Prevention consists of all measures, including definitive therapy, that limit the progression of disease (Edelman & Mandle, 1994). Prevention has traditionally been viewed according to three levels: primary, secondary, and tertiary. Primary prevention is aimed at intervening before pathological changes have begun and seeks to eliminate or reduce host susceptibility (Valanis, 1992). According to Valanis, primary prevention is accomplished through two types of activities: general health promotion and specific protection.

Spellbring (1991) stated that health promotion consists of three phases: education, encouraging compliance with health- and disease related regimens, and gaining access to social and medical programs. It is through the process of health education that persons are led toward voluntary changes of their health behaviors. Whereas, numerous health educators have expressed doubt about the effectiveness of health education in terms of

either behavior change or compliance (Damrosch, 1991), there is some consensus among health psychologists that behavioral change will probably occur when clients perceive that (1) the threat to both health and their personal vulnerability is high, and (2) conditions of self-efficacy (i.e., the client's ability to perform the response that reduces the threat) and response efficacy (the response's effectiveness in overcoming the threat) prevail (Damrosch, 1991).

The second type of primary prevention, specific protection, emphasizes shielding or defending the body from injury. In the prevention of cervical cancer, one could conceivably argue that using barrier methods of contraception, for example, latex condoms and diaphragms, could be considered specific protection. Data show that the great majority of all grades of cervical intraepithelial neoplasia (CIN) can be attributed to human papillomavirus (HPV) infection (Schiffman et al., 1993). Thus, prevention of HPV infection through the use of contraceptive barriers could potentially decrease the incidence of cervical cancer. Unfortunately, there is no known primary prevention activity that can reduce the incidence of breast cancer.

Secondary prevention seeks to detect disease early, treat disease promptly, and cure disease at its earliest stage (Valanis, 1992). Screening is the most common form of secondary prevention. Prevention activities to screen for breast cancer include: breast self-examination, clinical breast exams, and screening mammography. These screening activities offer women the greatest potential for lowering their risk of dying from breast cancer and for reduced levels of morbidity (Sparks et al., 1996). Genetic testing for breast cancer is a powerful screening tool that may offer some hope for a select group of high-risk women. Genetic evaluation with BRCA1 gene analysis is becoming available but is not yet recommended as a routine screening method for the general population (Fiorica, 1996). Cervical cancer prevention includes Pap screening and related testing.

Precancerous stages of the cervix (dysplasia) can be detected by obtaining a Pap test (ACS, 1995).

Tertiary prevention includes limitation of disability and rehabilitation retraining for maximum use of remaining capacities of those persons for whom residual damage already exists (Valanis, 1992). An example is the planning of an exercise program for a client recovering from a modified radical mastectomy in the treatment of breast cancer.

Breast and Cervical Cancer Screening

Breast and Cervical Cancer Screening Objectives

The breast and cervical cancer screening objectives in *Healthy People 2000* (U.S. Department of Health and Human Services, 1992) include: (a) reduce breast cancer deaths to no more than 20.6 per 100,000 women (age-adjusted baseline = 22.9 per 100,000 in 1987); (b) reduce deaths from cancer of the uterine cervix to no more than 1.3 per 100,000 women (age-adjusted baseline = 2.8 per 100,000 in 1987); (c) increase to at least 80 percent the proportion of women aged 40 and older who have ever received a clinical breast examination and a mammogram, and to at least 60 percent those aged 50 and older who have received them within the preceding 1 to 2 years (baseline = 36 percent of women aged 40 and older "ever" in 1987; 25 percent of women aged 50 and older "within the preceding 2 years" in 1987); and (d) increase to at least 95 percent the proportion of women aged 18 and older who have ever received a Pap test and to at least 85 percent those who received a Pap test within the preceding 1 to 3 years (baseline = 88 percent "ever" and 75 percent "within the preceding 3 years" in 1987). Baseline and target figures for special populations examined in this project are shown in Table 4.

Table 4. Special Population Targets.

	1987 Baseline	2000 Target
Clinical Breast Exam & Mammogram:		
Ever Received:		
Women aged 70 and older	25%	80%
Received Within Preceding 2 Years:		
Women aged 50 and older	25%	60%
Women aged 70 and older	18%	60%
Pap Test:		
Ever Received:		
Women aged 70 and older	76%	95%
Received Within Preceding 3 Years:		
Women aged 70 and older	44%	70%

Resource: Healthy People 2000: National Health Promotion and Disease Prevention Objectives. (1992). U.S. Department of Health and Human Services. Boston: Jones and Bartlett Publishers. p. 115.

In 1994 approximately 62% of Montana women 50 years of age and older had a clinical breast examination and mammogram at some point (U.S. Department of Health and Human Services & CDC, 1996). In 1993, about 76% of women between the ages of 50 to 64 and 60% of women over 65 had a Pap test within the previous two years (Montana Department of Health and Environmental Sciences, 1993). This same report stated that in 1993, nearly all women in Montana (99 percent) have heard of Pap testing and 95 percent have had a Pap test at some time in their lives. The preceding result was indeed good news for the state of Montana. This figure indicated that the state did meet one of the *Healthy People 2000* objectives in 1993 (i.e., increase to at least 95% the proportion of women who have ever received Pap testing.)

Screening for Breast Cancer

Early detection of breast cancer is of utmost importance due to the direct relationship between prognosis for recovery and stage of the disease at the time of discovery. Thus, considerable emphasis has been placed on three commonly used breast cancer screening methods including: (1) breast self-examination, (2) mammography, and (3) clinical breast examination.

Breast self-examination (BSE) is the most controversial screening method with reports of inconsistent research findings regarding the accuracy and sensitivity of BSE to detect breast cancer. A 1991 report out of England stated that there was no evidence that BSE reduced deaths from breast cancer (Bhakta, 1995). It has also been suggested that patient BSE makes a minimal additional contribution in detection of breast cancer when mammography and clinical examination are being used (O'Malley & Fletcher, 1987). The primary limitation of BSE is that "a lesion that is palpable has a high potential to be metastatic; therefore, detection by BSE is at a later stage than is achievable with mammography" (Owen & Long, 1996, p. 3).

Although controversy continues, the majority of data on the efficacy of BSE suggests that it has a small but measurable impact on earlier detection of breast cancer as measured by clinical stage and tumor size. No study has shown negative effects for BSE (Grady, 1992).

Clinical breast examination is performed by a trained health care provider. The ACS recommends yearly clinical breast exams for women age 40 and older. Similar to other cancer screening tests, obtaining annual clinical breast exams is often neglected by women. A study by Keller et al. (1980) revealed that only half of the women between the ages of 25 and 65 have annual clinical breast examinations.

Mammography is a low-dose x-ray procedure that can detect cancers, through visualization of the internal structure of the breast, too small to be felt during BSE or

clinical breast exam. One of the advantages of mammography is that it can detect cancer an average of 1.7 years before the woman can palpate the lump herself (CDC, 1992b). This is critical because cancers detected at a smaller size are less likely to have spread to regional lymph nodes or distant body sites. Another advantage of mammography is that it has a higher sensitivity (76-94 percent) than clinical examination (57-70 percent) or BSE (20-30 percent). Mammography also has a specificity which is greater than 90 percent (CDC, 1992b).

Screening mammography has been shown to reduce mortality from breast cancer by 20 to 39 percent among women aged 50 years or older (Kerlikowski et al., 1993). However, Mor et al. (1992) reported that there is no evidence for a mortality benefit attributable to mammography screening of women over age 75.

The American Cancer Society (ACS) recommends annual mammograms for women over 50 with no upper age limit stated for the discontinuation of mammograms. Older women and their health providers struggle with making a decision regarding when to stop or limit annual mammograms. At the present time, there are no direct data available that can be used to absolutely determine at what age mammography screening becomes of little value (Kopans, 1992). Numerous researchers (Kopans; Mor et al., 1992; Frame, 1992) have concluded that the benefit from mammography screening must be viewed in terms of life expectancy and the quality of life. Clearly, the age at which mammography screening is no longer beneficial remains debatable.

Screening for Cervical Cancer

The Papanicolaou (Pap) smear is a screening tool that identifies women likely to have premalignant disease and at high risk for cervical cancer (NCI, 1996d). Reporting of Pap smears is accomplished through the Bethesda System developed in 1988. Strengths

of the Bethesda System are that it requires an evaluation of the adequacy of the specimen and encourages a descriptive diagnosis of abnormalities.

The effectiveness of early detection through Pap smear testing has resulted in a marked decrease in mortality from cervical cancer (U.S. Public Health Service, 1994). The incidence of invasive cervical cancer has been estimated to have been decreased 70 percent by screening. However, there are some limitations to Pap smear testing. Pap testing has a sensitivity of 50-90 percent, depending on the technique employed to obtain the cytologic specimen and the adequacy of its review by the cytologist (NCI, 1996d). A large proportion of false-negative Pap smears is attributed to the above factors.

Computer-assisted cervical cancer screening using neural networks is the latest system for identifying abnormal cervical cells (Mango, 1994). This system identifies abnormal patterns and clusters of cervical cells by displaying them on a high-resolution video monitor for in-depth review by pathology experts. Computer-assisted screening, used in conjunction with Pap smear screening, is being promoted as the new standard of accuracy. In one multicenter clinical trial that analyzed 9,666 Pap smears, the use of computer-assisted screening was proven to increase the detection of cervical abnormalities by as much as 30 percent (PAPNET of Ohio, 1996). The company (PAPNET) that markets computer-assisted cervical cancer screening charges approximately $18.00 for each test processed compared to $12.00 - $15.00 for traditional Pap smear testing utilizing the Bethesda System.

In summary, mortality reduction can be impacted significantly by increasing the percentage of cervical neoplasms detected in the precancerous or localized stages (NCI,1996b). The NCI stated that this can be accomplished by screening women at greatest risk for cervical cancer, i.e., those who have not had a Pap test or those who have not had one for several years. Older women, women of lower socioeconomic status, and

women of minority groups are all considered at greater risk for the development of cervical cancer (NCI).

Focus Groups

In the last two decades, focus groups, a predominant form of qualitative research, have been widely used by health education program planners and researchers. Focus group interviewing has its origins in marketing research (Kotler & Roberto, 1989). Focus groups represent the explicit use of small group interaction to produce data and insights that would be less accessible without the interaction found in a group (Zapka & Berkowitz, 1992). Specifically, focus groups can provide program planners with insights into the feelings, attitudes, knowledge, beliefs and behaviors of their audiences (CDC, 1994).

A typical focus group consists of six to ten persons who are invited to meet with an interviewer for a few hours to discuss products, programs, services, institutions or other objects of interest. The interviewer usually starts with a broad question and then moves successively to more focused questions (Kotler & Roberto, 1989). Information is not only requested by the interviewer but volunteered by the participants. The interviewer or moderator is responsible for encouraging free and easy discussion among the participants in hope of fostering group dynamics that will bring out actual feelings and thoughts. Comments are recorded through note taking and/or tape recording and then analyzed to determine participants' thought patterns (Kotler & Roberto).

The information obtained from a focus group can be used for a variety of purposes including: (a) diagnosing the potential for problems with a new program, service, or product; (b) obtaining general background information about a topic of interest; (c) stimulating new ideas and creative concepts; (d) learning how the participants talk about the phenomenon of interest; (e) facilitating the design of questionnaires, survey

instruments, or other research tools that might be employed in more quantitative research; (f) generating impressions of products, programs, services, institutions or other objects of interest; and most importantly (g) assessing audience needs (National Institutes of Health [NIH], 1992).

There are both advantages and limitations to using focus groups. One advantage is that a focus group can provide data from a group of people much more quickly and at less cost than would be the case if each individual were interviewed separately (NIH, 1992). Another advantage is that the open response format of a focus group allows respondents to talk in their own words. This adds to the richness of data obtained.

Limitations include (a) it is hard to generalize information to larger populations due to small sample size, (b) responses are not independent of each other, (c) responses may be biased by censoring or conformity, (d) interaction of researcher or interviewer may bias results, (e) there is a limit to the number of questions that can be asked, and (f) open-endedness makes summarization and interpretation difficult (Morgan, 1993). Even with these limitations focus groups offer candid opinions that provide invaluable information for health education program planners and researchers.

Target Population: Older Rural Women

The largest generation in American history, otherwise known as "baby boomers", began turning 50 in 1996. Seventy-eight million Americans were born between 1946 and 1964. About 10,000 Americans will turn 50 each day for the next 10 years. Additionally, statistics show that by the year 2020 nearly 42.3 percent of the national population will be 55-64 years of age, while 22.4 percent will be 75 years old and over (McConnell, 1996). In 1993, 13.4 percent of Montana's population were age 65 and over and 1.4 percent were age 85 and older (U.S. Department of Health and Human Services; CDC, 1996).

What does this mean? The rapid increase in the proportion of older adults has important implications for health care providers. Older adults should be targeted for health promotion and screening activities to improve their quality of life. Specifically, older women are a group that would benefit from health promotion and screening activities. Older women in general live longer than men but this longer life is characterized by a greater number of chronic health conditions including heart disease, cancer, and cerebrovascular disease (McCulloch, 1991).

For the purposes of this project, older rural women are defined as women age 50 and over who live in rural areas. Counties encompassing cities of less than 50,000 population are considered rural areas (Hewitt, 1993). First, general characteristics of rural residents, including elderly, were examined. Second, characteristics of rural women were reviewed. Finally, characteristics of older rural women were examined.

Overall, rural residents define health as the ability to work (Davis et al, 1991; Weinert & Long, 1991). Rural residents express attitudes of independence and self-reliance which, according to Thorson and Powell (1991), are values consistent with concepts of pioneer virtues and responsibility. Rural residents tend to rely on informal sources such as family, relatives, coworkers, and friends for health-related concerns (Davis et al.; Weinert & Long, 1991). In a study conducted by Davis et al., older rural adults tended to rely first on their own appraisal and resources to manage health problems and only when their own actions failed did they indicate that they would seek help within the formal health-care system.

Distance to health care providers and hospitals for rural residents can be considered a significant barrier to health promotion activities. In a study conducted in rural Nebraska, however, older residents traveled on the average of 47 miles to obtain health care and did not perceive this as a barrier (Thorson & Powell, 1991).

Positive data exist regarding women's overall usage of health services. According to Whetstone and Reid (1991) numerous studies have demonstrated that health interests and the relief of symptoms account for greater usage of health services, medical care facilities and physician visits by women than by men. These differences may relate to the fact that women are more willing to acknowledge and report their illnesses than men (Whetstone and Reid).

Additionally, the literature indicates that women are more self-care oriented than men (Whetstone & Reid, 1991). According to a study conducted by Lantz (1985), older adults with a greater ability to assume self-care possessed the following characteristics (a) were female, (b) perceived themselves to be in good or excellent health, (c) possessed self-actualizing traits, (d) placed a high value on self-worth, and (e) exhibited a high degree of wellness.

Specifically, rural women possess their own unique characteristics. Rural women describe the ideal life-style as being married with children but without employment outside the home (Bushy, 1991). Bushy further describes the identity of a woman in a small community as based on her relationship to someone else. Bushy states that because rural women are viewed as the wife, mother, daughter, or sister of another person, this contributes to low self-esteem and a poor self-concept which ultimately may influence a rural woman's health-promoting behaviors.

Older rural women tend to maintain traditional values which include raising a family without employment outside the home. They may have contributed labor to the family farm or business, but this type of labor generally does not produce a salary, Social Security, insurance, or retirement benefits (Bushy, 1991). Because of these practices, many older rural women experience financial difficulties when they have been displaced either by their spouse's death or divorce. Lack of insurance and lower income can be significant barriers to health promotion. Economic conditions can adversely affect the

health status of older rural women. Census data reveal that women in rural communities tend to be living under conditions of greater economic need than their urban counterparts which ultimately has an impact on their health status (Bushy). Chronic and acute illnesses occur more frequently in elderly persons who are poor, have little education, live in rural areas or in inadequate housing, or are older women (Leslie & Swider, 1986).

Preventive Behaviors of Older Women related to Breast and Cervical Cancer

It has been previously noted that incidence rates for both breast and cervical cancer increase with age. Coupled with the increasing numbers of older women in American society, this highlights the need for increased health promotion and disease prevention activities for older women. However, older women remain less likely to participate in disease screenings including clinical breast examination, mammography or Pap test (Makuc, Freid, & Kleinman, 1989; Rimer, Ross, et al., 1992; Rimer, Resch, et al., 1992). For example, elderly women are likely to be lifelong nonusers or underusers of Pap screening (Mandelblatt, Gopaul, & Wistreich, 1986).

Results, from a study investigating national trends in the use of preventive health care by women, show older women and poor women were more likely to never have received breast or Pap screening in their lifetime (Makuc et al., 1989). The researchers partially attributed the decreasing use of Pap screening with increasing age as related to the high prevalence of hysterectomies in women over the age of 40. However, the American College of Obstetricians and Gynecologists recommends continued Pap screening even for women who have had hysterectomies.

Bergman-Evans and Walker (1996) reviewed data on the use of preventive services by the elderly from the government Office of Technology Assessment (OTA). The OTA analysis of data from the 1982 National Health Interview Survey revealed that

the use of breast examinations and Pap smears by adults over age 65 was consistently related to younger age, higher education and income, health insurance coverage beyond Medicare, living in a metropolitan area, and having spent more days in bed during the previous year.

Bergman-Evans and Walker (1996) conducted their own study using data on 5,574 women ages 65 and older from the 1991 Health Promotion and Disease Prevention Supplement of the National Health Interview Survey. They found that the proportion of women receiving clinical breast examination in the past year declined from 57 percent among the young-old (65 to 74 years old) to 43 percent among the oldest-old (85 years and over). Only 54 percent of the young-old women had obtained a mammogram in the past 2 years. Additionally, the proportion of women receiving a Pap test in the past year declined from 42 percent among the young-old to 16 percent among the oldest-old. The researchers of this study concluded that the decreasing rate of Pap smear screening with age may be due to a decreasing frequency of regular gynecological examinations and/or to the misconception that Pap smears can be discontinued following hysterectomy (Bergman-Evans & Walker) .

According to Lauver (1992) only 46 to 76 percent of white Americans aged 54 to 74 have had a recommended clinical breast examination in the prior year. Lauver reported the following cancer screening activities of older women: (a) they are less likely to be taught breast self-examinations than younger women, (b) they receive fewer Pap tests and mammograms than do younger women, and (c) they often see specialists who do not perform Pap smears routinely, as do gynecologists or obstetricians.

The question becomes, "Why do older women not avail themselves of effective screening methods for breast and cervical cancer?" Factors associated with low utilization of screening methods are multifarious. According to Lauver (1992) barriers to cancer screening are related primarily to clients, practitioners, and health care system. Lauver

cited client-related barriers included psychosocial factors, such as beliefs, norms, and affect regarding the screening. For example, women who do not believe in the need for screening (i.e., in the absence of symptoms) are less likely to seek mammography and Pap screening. Barriers specifically related to less use of mammography included: fear of developing or finding cancer, embarrassment, concerns about radiation exposure, and fear of painful mammography (Lauver). Barriers specifically related to lower rates of Pap screening included: embarrassment, fear of finding an abnormality, not viewing self as vulnerable to cervical cancer, and not perceiving benefit of early detection and treatment of cervical cancer (Lauver).

Barriers to mammography screening cited by rural women in a breast cancer screening project conducted in four rural Michigan counties included (a) cost was high, (b) physician never suggested screening, (c) screening was embarrassing, (d) screening was unpleasant, (e) did not know when they needed screening, (f) mammography was not available where they lived, and (g) it was not convenient to arrange screening (Sparks et al., 1996). Annual family income less than $20,000 accounted for 83 percent of the women participating in the study (N=103). Additionally, 99 percent of the women participating had no health insurance or had health insurance that did not reimburse screening mammography. This study highlights the fact that having health insurance does not guarantee that women will obtain mammography screening or necessarily be able to afford screening. Many women have substandard health insurance that does not reimburse disease prevention screening.

In a study conducted by Harlan, Bernstein, and Kessler (1991), Pap smear screening rates, beliefs about appropriate screening intervals, and factors affecting screening were examined using 1987 National Health Interview Survey questionnaire data completed by 12,868 women age 18 and older. They found that reasons varied for non-compliance in obtaining Pap smears, but nearly 60 percent of the reasons basically

revealed a lack of appreciation of the importance of screening. They further concluded that barriers to obtaining Pap smears by U.S women included (a) women were not adequately educated about the importance of routine screening, (b) women received little guidance from medical providers, and (c) the controversy regarding the accuracy of the reading of Pap smears tended to convey a message that screening is unimportant or results are of questionable quality. Lauver (1992) reported that a chief barrier to women receiving cervical cancer screening tests is the failure of practitioners to perform or refer women for the tests.

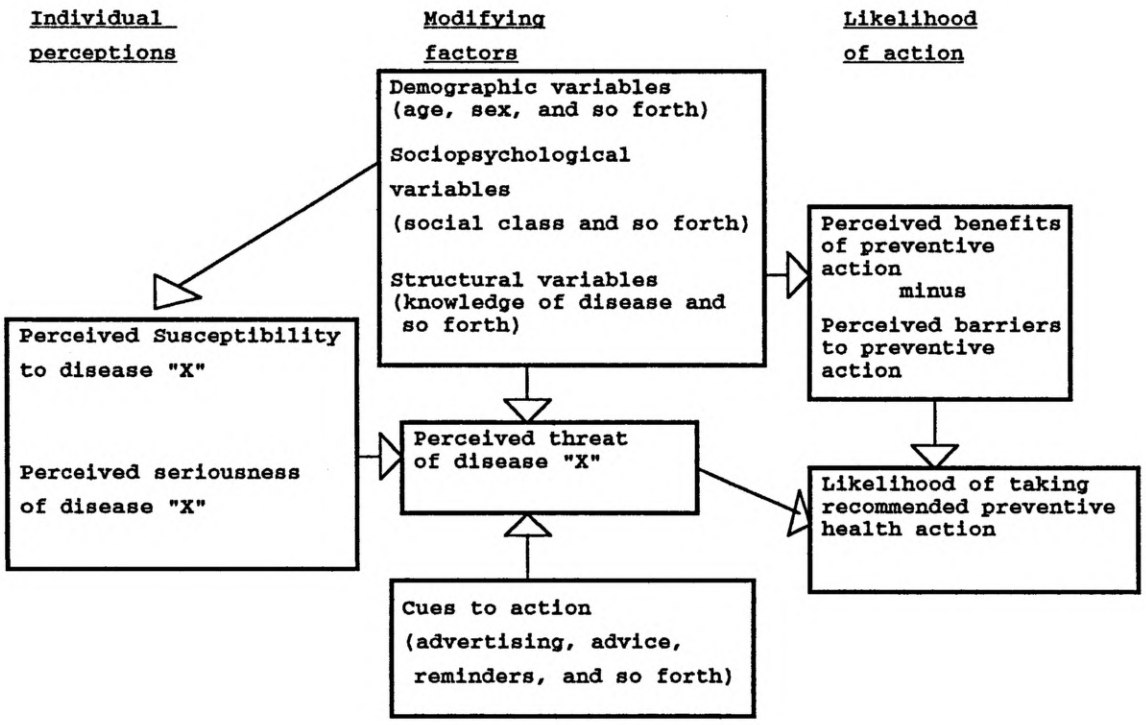
Conceptual Framework: Health Belief Model

Hochbaum, Leventhal, Kegeles, and Rosenstock developed the Health Belief Model (HBM) during the 1950's (Rosenstock, 1974). The HBM was originally formulated to explain preventive health behavior. It was also developed to understand the failure of the public to accept preventive measures, such as screening tests, for the early detection of asymptomatic disease. Rosenstock related how these preventive measures were usually provided on a demonstration basis, free of charge, or at a very low cost, yet the public were not utilizing these services. The HBM states:

> . . . the clients' perception of health states and risk of disease and the person's probability for taking appropriate health care actions depend on the person's value of health, perceptions about disease, perceived threat of disease, perceptions about the medical team and therapy plans, past experience, contact with risk factors, level of participation in regular health care, life aspirations, and various motivating factors in the environment. (Murray, 1993, p. 660)

The HBM has been used extensively to organize theoretical predictors of preventive health actions, including breast self-examination and mammography (Fulton et al., 1991). The major components of the model are (a) individual perceptions, (b) modifying factors such as demographic variables and cues to action, and (c) the likelihood of action (see Figure 2).

Figure 2. Overview of the Health Belief Model.



Derived from Becker, M. H., editor: "The Health Belief Model and Personal Health Behaviors." Charles B. Slack, Inc., Thorofare, N. J., 1974, p. 7.

Individual perceptions include the dimensions of *perceived susceptibility* and *perceived seriousness*. Perceived susceptibility refers to one's subjective perception of the

risk of contracting a condition (Rosenstock, 1974). Perceived seriousness addresses two factors including (a) the degree of emotional arousal created by the condition and (b) the kinds of personal difficulties one believes a given health condition will create.

Modifying factors include the variables of (a) *demographic variables*, i.e., age, gender, ethnicity; (b) *sociopsychological variables*, i.e., personality, social class, peer pressure); and (c) *structural variables*, i.e., knowledge about the disease and prior contact with the disease. These are all variables that condition individual perceptions.

Perceived threat of a disease is considered another modifying factor (Fulton et al., 1991). The final modifying variable within the HBM is *cues to action*. Becker (1974) believes that individuals seek health care on the basis of "cues to take action." Cues include advice from others, mass media campaigns, reminders from health care providers, illness of a family member or friend, and written information.

The likelihood of action includes the *perceived benefits* of preventive action minus the *perceived barriers* to preventive action. An example of this relationship is cited by Fulton et al. (1991) regarding the likelihood of women obtaining mammograms. For example, women may perceive mammograms as being beneficial for finding breast cancer, but at the same time, they may perceive mammograms as uncomfortable, which can affect their likelihood of taking recommended preventive health action.

Self-efficacy is a more recent concept that was added to the HBM in order to increase its explanatory power. Self-efficacy is defined as the conviction that one can successfully execute the behavior required to produce the outcomes (Rosenstock, Strecher, and Becker, 1988). For example, an older woman must believe that she has the ability to follow through with a screening procedure, i.e., self-breast examination, mammogram, clinical breast exam, or Pap smear, and that the effects will be beneficial.

Criticism has been directed at the HBM due to a variety of factors. Thomas (1995) stated that although the HBM has been the most frequently used social behavior theory, it is limited in scope, especially regarding women and people of color. One is not drawn outside of the scope of the forces that shape the characteristics described by the model. The HBM is derived from a scientific paradigm that is inconsistent with studying and understanding beliefs and behavior of women and people of color. She also stated that attempts to holistically examine motivators of and barriers to health promotion have failed using the HBM.

Some researchers have concluded that the model is most successful when applied to secondary prevention and that it is less clear how useful the model is for understanding health behaviors that involve lifestyle changes (Fulton et al., 1991). However, there is some question of its usefulness in explaining cancer screening behaviors. For example, Rosenstock (1974) proposed that perceived susceptibility and perceived seriousness provide the energy force to engage in health behavior. This is incongruent with current health behavior related to cancer screening. Cancer is considered a serious and fearful disease by most Americans, but the use of screening methods remains low.

In summary, the HBM is directed at understanding health protection activities. These activities are aimed at protecting a person's current state of health rather than taking steps toward moving to a higher state of health. These specific health protection activities can include both primary and secondary prevention measures. The HBM maintains that the perceived barriers to health prevention are carefully weighed by the client and include issues such as cost, inconvenience, unpleasantness of treatment, fear of pain, and extent to which change in life behavior is required (Becker, 1974).

CHAPTER 3

METHOD

This project was designed to educate older rural women and to increase their knowledge and awareness regarding the importance of breast and cervical cancer detection/screening. The method chapter describes the steps that were taken to address the project objectives. Objectives included (a) increasing women's awareness of the importance of screening, (b) increasing women's knowledge of screening guidelines, and (c) increasing women's knowledge of where to get screened.

Implementation of the project occurred in three phases. Phase I included (a) completion of a literature review relevant to breast and cervical cancer screening, and (b) facilitation of a focus group consisting of older rural women. Both of these activities produced data and insights that were used for the development of educational intervention strategies. Phase II was the development of educational strategies including: (a) selection of pamphlets, posters, and videos; and (b) construction of a poster presentation. Finally, Phase III included the delivery and presentation of breast and cervical cancer screening information at a rural county fair in Bozeman, Montana.

Phase I: The Focus Group

A focus group was formed to obtain insights into the feelings, attitudes, knowledge, beliefs and behaviors of older rural women pertaining to breast and cervical cancer screening. The primary target group for this project was rural women age 50 years and older; thus women participating in the focus group were age 50 and older. Although

breast and cancer screening information was ultimately disseminated at the rural county fair in Bozeman, Montana, participants for the focus group were recruited in Kalispell, Montana for the convenience of the interviewer. Kalispell is a rural community of 25,000 residents, similar to Bozeman in size, rurality, and socioeconomic composition.

Women were recruited using a snowball technique. The interviewer contacted a friend who then contacted friends who might be interested in participating in the focus group. Six women were recruited in this way. Participant ages were 50, 60, 62, 63, 75, and 78. Average age was 64.6 years. Two of the participants were widows, 2 were married, 1 was divorced, and 1 was single. Four were employed and 2 were retired. All of the participants were Caucasian. Income status was not obtained.

Every effort was made to protect privacy of the participants involved with the focus group. Participation in the focus group was strictly voluntary. Verbal informed consent was obtained from each participant. Participants were informed that they could elect not to respond to any or all questions. Participants were informed that information obtained from the focus group would be reported anonymously, i.e., no names would be connected to information reported. Participants were informed of the possible risks and/or benefits associated with participation in the focus group.

The focus group was led by the author who served as the interviewer. The focus group session was not tape recorded, but notes were taken by the interviewer. Focus group participants were asked a variety of questions including where they obtained information regarding screening tests and from whom they preferred to get screening information. The focus group format and specific questions asked are outlined in Appendix A.

Additionally, the focus group members were asked to evaluate brochures, pamphlets, and videos pertaining to breast and cervical cancer screening. The pamphlets and brochures were passed around the room and the participants were encouraged to

openly comment on this material. Several videos were shown and again the focus group members were asked to comment on these videos. A complete list of resource materials is included in Appendix B.

Phase II: Development of Educational Strategies

Cancer organizations were contacted to obtain publications and educational materials related to breast and cancer detection and screening. Organizations included: (1) National Cancer Institute (NCI), (2) American Cancer Society (ACS), and (3) "Y-Me" National Breast Organization (addresses of cancer organizations and descriptions of materials presented at the county fair are included in Appendix B).

In addition to information derived from the focus group, Becker's 1974 health belief model (HBM) was utilized to guide the selection of appropriate educational materials. For example, breast cancer risk factors were outlined in pamphlets and videos; this information addressed the HBM component of "individual perceptions", in this case the individual's *perceived susceptibility* to cancer and to complications (Agars & McMurray, 1993). Material was available regarding importance of early detection. This material addressed a second HBM component of "individual perception" that of the *perceived seriousness* of cancer.

Information regarding cancer survival rates was distributed. Both documentation of survival rates and effectiveness of early screening addressed the "likelihood of action" dimension, specifically *perceived benefits* of preventive action. Information that identified where to obtain screening was offered; this, along with promotion of the idea that BSE is simple to perform and is not time-consuming addressed common *perceived barriers* to screening and BSE practice, another "likelihood of action" dimension.

A poster display was constructed that included breast and cervical cancer screening information. The poster board was divided into 5 panels covered with

aesthetically pleasing light purple material. Four of the panels were16 inches by 42 inches and the center panel was 32 inches by 42 inches.

Panel number 1 included information about who needs a mammogram and emphasized that the older a person is, the more they need a mammogram. It also displayed a birthday cake to emphasize the idea of getting a mammogram as part of celebrating birthdays. The focus group members viewed this as a positive message.

Panel number 2 included pictures of 3 older women stating what they felt about getting a mammogram. Women in the focus group stated they viewed this as adding a personal touch to the display and thought it was important to see and read about other women their same age.

Panel number 3 included information about the three easy steps for good breast care, i.e., breast self-exam, clinical breast exam, and mammogram. This panel included specific steps outlined in text form and illustrations.

Panel number 4 included information about Pap tests. A picture was displayed depicting an older women asking 5 questions regarding Pap tests and the answers to these questions were presented on the same panel surrounding the picture. Questions and answers included:

1. What is a Pap test? Answer: "A Pap test can find cancer of the cervix early. If it is found early, it is easier to cure."
2. Who needs a Pap test? Answer: "You do if you are over 18 or you are 18 or under and have sex."
3. Where do I get a Pap test? Answer: "Nurse Practitioner, family doctor, OB/GYN clinic, or medical clinic."
4. Why is a Pap test important to me? Answer: "Because it can tell if you have cancer of the cervix early - while it is still easier to cure."
5. When should I get a Pap test? Answer: "Get a Pap test every year."

Panel number 5 included free information about breast and cervical cancer detection/screening. Pamphlets and brochures were displayed on this panel.

Five posters depicting reproductions of art that included messages of the importance of regular screening mammography for women beginning at age 50 were displayed in the booth space. Poster number 1 depicted Mona Lisa with the message, "Why is this woman smiling? Because she's over 50 and has regular mammograms." Poster number 2 depicted women working in a field with the message, "Finding a breast cancer tumor can be like trying to find a needle in a haystack. A mammogram can find it early when it is most treatable. If you are 50 or over, schedule regular mammograms." Poster number 3 depicted three African-American women with the message, "Spread the word about mammography. Get regular mammograms starting at age 50." Poster number 4 depicted a women raising her hand with the message, "I promise to schedule regular mammograms beginning at age 50. If you are a women 50 or over promise yourself regular mammograms too." Poster number 5 depicted a woman working in a kitchen with the message, "Are you a woman 50 or over? Take time out to schedule regular mammograms."

Videos were selected based on feedback from the focus group. The focus group members selected the videos based on several qualities including tastefulness, minimum nudity, and most informative. Videos selected were (a) Woman to Woman: Straight Talk About Mammography, (b) Breast Self-Exam Techniques, and (c) Taking Control of Your Health: The Pap Test and Cervical Cancer. Content of videos, cost, and where to obtain videos are listed Appendix B.

Phase III: Delivery of Information at Rural County Fair

Phase III was the delivery and presentation of breast and cervical cancer screening information at a rural county fair in Bozeman, Montana. The Gallatin County Fair in

Bozeman, Montana was selected as the site for presentation because (a) there was no charge for booth space if exhibit was for public education, and (b) the county was rural.

The Gallatin County Fair took place from July 17-21, 1996. Exhibit space was provided in one of three main exhibit buildings on the fairgrounds. The space provided for the breast and cervical health awareness exhibit was 10' x 5'. It was located between a stop-smoking educational exhibit and a commercial exhibit advertising a book about elk hunting in Montana.

The author was available during the day at the exhibit booth to answer questions, show videos, and hand out brochures. In the evening hours, the booth was untended. Evaluation forms were available for women viewing the booth (see Appendix C). The exact number of people attending the fair was unknown, although over a period of four days, approximately 36,000 people attended the Gallatin County Fair in 1995.

CHAPTER 4

PROJECT OUTCOME

Results

Evaluation of Focus Group Results

Focus group questions were divided into specific categories. Questions #1-6 were concerned with the participant's general health background. Questions #7-10 were designed to seek information regarding the participant's general attitudes and beliefs about cancer. Question #11 pertained to the participant's attitudes and beliefs about breast cancer. Question #12 asked specifically about the participant's beliefs regarding cervical cancer. Question #13 was designed to explore the participant's ideas about strategies of promotion of breast self-examination, clinical breast exams, mammography, and Pap smears. The results are reported in a summary format as well as direct quotes from the participants.

Focus group question #1 asked: "Where do you go for health care treatment or advice and who do you see there?" Five of the participants responded that they received care from physicians. One of the participants said she received care from a massage therapist in addition to a physician.

Question #2 asked: "Are there any medical tests or exams you get from your doctor or nurse to make sure you are healthy?" Answers included the following tests and exams: mammogram, Pap smear, cholesterol screening, breast exam, pelvic exam, rectal exam, check for blood in stool, blood test to check for anemia, and sigmoidoscopy. All of the participants had received a mammogram and Pap smear within the last 3 years.

Question #3 asked: "In a examination, does a doctor or a nurse examine your breasts? How often?" Five of the participants responded that a doctor examined their breasts yearly. The oldest participant stated: "I have been going to the same doctor for the last 2 years and he has not examined my breasts. In fact he doesn't even have me take my clothes off for my yearly physical exam. He listens to my heart and lungs through my blouse. Maybe he thinks I'm too old for a complete examination."

Question #4 asked, "Who do you turn to for advice with a health problem?" All of the participants stated that they go to family members and friends initially for advice with a health problem. The two oldest participants stated they have family members in the medical profession that they always consult with prior to asking for advice from their physicians. Four of the participants included physicians and nurses as people that they would turn to for advice with a health problem.

Part A of question #5 asked: "Where do you get information about health that you trust?" Family members and friends were rated as primary source of information by all participants. Doctors and nurses were rated second, magazines or newspapers third, and TV programs, i.e., national and local news, TV news shows, fourth. None of the participants received health advice from the radio. Participants stated they didn't read information from health brochures and pamphlets unless it was specifically given to them by a health care professional. Participants also stated a preference for health information from local publications. One participant stated: "I don't usually pick up and read health information in brochures or pamphlets. It seems so generic. I like the health information from the newspaper the local hospital publishes. It gives me information about what is happening in my community and helpful hints on ways to take better care of myself." Another participant stated she received health information from guest speakers at her health club. Part B of question #5 asked: "Whose advice is most likely to make you change how you take care of yourself?" All of the participants responded that a

physician's advice was most likely to cause a change in how they would take care of themselves. Three of the participants also mentioned advice from family members and friends as influencing how they would take care of themselves.

Question #6 asked: "What are health problems that concern you most?" Responses included: (a) weight concerns, both overweight and underweight, (b) high blood pressure, (c) cancer, (d) high cholesterol, (e) heart problems, and (f) arthritis. No one specifically mentioned breast or cervical cancer as a health concern, although 4 of the participants did mention cancer in general as a health concern.

Question #7 asked: "What comes to mind when you hear the word "cancer?" One woman stated: "I think about death and sickness when I hear the word cancer." Another woman stated: "Cancer has a lot of negative images. I don't like to think about it. I think about chemotherapy and radiation." Words and phrases cited by participants associated with cancer included: death, fear, radiation, chemotherapy, surgery, experimental drugs, remission, hair loss, and pain.

Question #8 asked: "What do you think happens to a person that gets cancer?" One participant stated: "It depends on what kind of cancer a person gets. For example lung cancer is worse than most cancers. If you get treatment as soon as the cancer is discovered, then you have a better chance at surviving."

Question # 9 asked: "Do you think most people who get cancer are going to die from it?" The participants all agreed that it depends on when the cancer was detected if the person is going to die from it. They agreed that if the cancer was detected at an early stage then there was a greater chance for survival. One participant had a fatalistic view and stated: "We are all going to die eventually, so it really doesn't matter if it is cancer or something else."

Question #10 asked: "Is there anything people can do to improve their chances of surviving cancer?" One participant stated: "If you go to a regional medical center in a big

city, then you probably will be able to get the best treatment available." Another participant stated: "I think if a person has a positive outlook on their chances for survival then they will probably live longer. I don't think people improve their chances of surviving cancer by taking treatments like shark cartilage or drugs from different countries."

Question #11, part A asked: "Is there anything that makes you feel more susceptible to breast cancer?" and "Is breast cancer something that you personally need to worry about?" Focus group members listed having a family history of breast cancer and being a women made them feel more susceptible to breast cancer. None of the participants stated age as a reason why they are more susceptible to breast cancer. They all responded "yes" that they needed to worry about breast cancer.

Part B of question #11 asked: "What do you think are the best ways to find out if a woman has breast cancer?" Four of the participants said they practice BSE, obtain yearly physical exams, and get yearly mammograms to screen for breast cancer. One of the participants commented that an ultrasound of the breasts was much more likely to detect breast cancer than a mammogram.

Part C of question #11 asked: "What do you think are some reasons why women do not perform BSE, get clinical breast exams or mammograms?" Comments included (a) "some women were taught they shouldn't touch their breasts", (b) "too shy to get mammogram", (c) "mammograms hurt", (d) "clinical breast exams and mammograms are expensive", (e) "Medicare only reimburses for mammograms every 2 years, so women may not get yearly exams", and (f) "when you get to be my age (78) you are glad to be alive and I may not want to find out if I have breast cancer."

Questions regarding cervical cancer were included in question #12, part A: "What is the best way to detect cervical cancer?" All of the participants stated that getting a Pap smear was the best way to find out if you have cervical cancer. Part B of question #12 asked: "Who do you think needs a Pap smear?" Three of the participants stated that all

women who were sexually active needed Pap smears. There was some disagreement in the group if women who have had hysterectomies needed Pap smears or if women who were not sexually active needed a Pap smear.

Part C of question #12 asked: "How often do you think women need Pap smears?" Four of the participants stated yearly and 2 of the participants questioned if yearly Pap exams were needed in elderly women who had negative Pap smears for 2 consecutive years. Part D of question #12 asked: "What do you think are some reasons women don't get Pap smears?" Comments included (a) "high cost of pelvic exam and Pap smear", (b) "lack of female providers", and (c) "confusion about who should get Pap smear and how often a women should get Pap."

Question #13 included brainstorming about strategies of promotion of BSE, clinical breast exams, mammography, and Pap smears. Part A of question #13 asked: "What message would you tell women in order to convince them it is important to obtain both breast and cervical cancer screening tests and exams?" Comments included (a) "provide information that addresses risk because they may not know they are at risk", (b) "provide lottery tickets or vouchers for free mammogram", and (c) "provide information they can take home to look at because they may not want to spend the time viewing videos or looking at posters at the fair."

Part B of question #13 asked: "Do you think brochures and/or pamphlets should be distributed at the fair?" Five of the participants stated that brochures should be available for women. One of the participants stated, "Some women may not pick up information because it would probably end up in the trash."

Part C of question #13 asked: "Do you think videos should be presented at the fair?" Three of the participants thought videos should be shown and 3 of the women thought they should not be shown because women would not take the time to view videos at the fair. None of the participants were objectionable to videos being shown that may

contain some nudity. The oldest participant stated, "There is more nudity on television and the movies than a video on breast examinations." All of the women agreed that if videos were presented they should show older women actively participating in cancer screening.

A variety of brochures and pamphlets were passed around the room for the participants to comment on. Comments included (a) "I like the ones with all the pictures", (b) "I don't like the brochures that have too many pages because I don't think women are going to spend the time to read them", and (c) "these pamphlets are okay, but I'm not a big fan of any kind of pamphlet."

Three videos were shown to the participants. The participants stated they liked the videos but again expressed their concerns regarding women at the fair taking time to view the videos. One of the participants stated, "When I go to a county fair, I want to spend my time looking at the farm animals and quilting exhibits - not watching women getting mammograms."

Evaluation of County Fair Presentation

Three methods were used in the evaluation of the county fair presentation: (a) personal observation, (b) results from an evaluation form, and (c) retrospective interviewing of 2 focus group members. One of the observations made by the author was that the breast and cervical awareness booth attracted more teenagers and older men than women. This may have been a result of the 2 adjacent exhibits to the author's booth. The "Stop Smoking" exhibit attracted teenagers who were observed picking up free chewing gum and pencils. The "Elk Hunting in Montana" exhibit attracted men of all ages.

Numerous comments were provided by fair goers. One elderly man commented, "My wife doesn't come to the fair, but I will give her this information (pamphlet) on cancer screening." An older women stated, "I'm a nurse and I know all of this

information. It is nice to see it presented at the fair, but I would guess you aren't getting very many women stopping at your booth." Several women stopped and asked if they could get information about the nursing program at Montana State University. Overall, few older women stopped at the exhibit. In fact, it was observed by the author that there were not many older women attending the fair.

Evaluation forms were provided at the exhibit (see Appendix C). Unfortunately only 4 women returned an evaluation form. All of the women who returned an evaluation form found the exhibit somewhat helpful, somewhat informative, and somewhat effective. They also ranked the videos as somewhat helpful, somewhat informative, and somewhat effective. None of the women wrote additional comments about the health exhibit and videos.

Comments were obtained retrospectively from 2 focus group members to further evaluate the fair presentation. Specifically, the author described the outcome of the fair presentation including (a) few older women stopped to view the breast and cervical cancer awareness booth, (b) women were not interested in picking up brochures and pamphlets, and (c) the majority of women who stopped did not spend the time to view the videos. The author asked for their opinions about these outcomes. They both stated that they were never asked if having a breast and cervical cancer awareness booth at a county fair was a good idea. If they were asked this question they would respond that the fair was probably not the best place to present this information. One of the focus group members stated, "I think women should get this kind of information from their doctor or at a health clinic."

Discussion and Summary of Results

In summary, the results of the focus group were similar to results found in the literature regarding breast and cervical cancer screening. For example, focus group

members commented that the expense and pain associated with mammograms were barriers to women obtaining screening. These barriers were also cited in the literature. None of the women listed "age" as a variable that would make them feel more susceptible to breast cancer. This was echoed in the literature review in studies conducted with older women.

The results of this project, especially the results obtained from the focus group, highlighted the barriers women face in obtaining breast and cervical cancer screening. Cost, inconvenience, fear, lack of female health care providers, and confusion regarding screening guidelines, were all cited by focus group participants as barriers to women obtaining breast and cervical cancer screening.

An assumption was made by the author that focus group members were supportive of presenting breast and cervical cancer information at a county fair, when in fact, they were opposed to this method. This highlights the need to listen to the target population and never assume to know their needs or desires. The acceptability by the target population can be one of the greatest indicators of a program's potential success.

This project was undertaken to increase older rural women's awareness of the importance of cancer screening. As stated previously, early detection and prompt treatment are the keys to reducing mortality from both breast and cervical cancers. The professional project objectives were (a) increasing women's awareness of importance of screening, (b) increasing women's knowledge of screening guidelines, and (c) increasing women's knowledge of where to get screened.

Implementation of the project was conducted in 3 phases. Phase I included an extensive literature review and conducting a focus group. Information obtained from the focus group was used in the development of educational strategies (phase II). Insight was gained through the focus group about preferred educational strategies including the use of videos depicting older women, colorful posters, and pamphlets that were short and easy to

read. Educational materials were also selected based on information derived from the Health Belief Model, which was also the project's conceptual framework.

Phase III was the delivery of information at a rural county fair. Few older women visited the county fair booth, thus it was difficult to measure the effectiveness of this educational format. One can speculate that older rural women did not stop at the booth due to the sensitive nature of breast and cervical health information presented. Overall, the greatest insights into targeting older rural women for cancer screening awareness were gained through the focus group.

Limitations

Limitations of this project should be considered in evaluation of the results. Limitations included (a) few older women attended the breast and cervical cancer awareness exhibit, and (b) no feedback was obtained on ability of women to achieve project objectives. Although useful comments were obtained from focus group members, one must use caution in extrapolating these comments to all older rural women. One must take into account the heterogeneity of older rural women.

Implications and Recommendations

Despite the limitations, this project has implications for the delivery of breast and cervical cancer screening information to older rural women. Focus group members reported that they would like to receive this information from their health care provider. This preference of the focus group participants has three implications. First, it is important for health care providers to give cancer screening information to older rural women in their practices. All of the women in the focus group had a health care provider and also obtained regular cancer screening. Secondly, it is important that cancer screening

education is provided to older rural women who do not have a health care provider or obtain routine screening. These women are at greater risk of increased breast or cervical cancer mortality due to undetected cancers or delayed treatment. Finally, the use of focus groups can provide invaluable insights that can be used in the development and evaluation of educational strategies and methods used to reach the target group.

The project results have implications regarding where cancer screening education is presented in the future. Presenting health information at "health fairs" does attract self-selected groups who are interested in promoting their health. Rural county fairs have not been used extensively in presenting health education. Although the breast and cervical cancer awareness booth at a county fair attracted few older rural women, there remains the possibility of altering the format at the county fair to attract more women. For example, placement of the booth next to a quilting exhibit may attract more older rural women. One may also take into consideration the time of day that most women are attending the fair and be present at the health booth for questions during this prime time. Additionally, providing incentives at the booth, i.e., free mammogram coupons, may attract the target group.

One common reason the literature frequently cites as a prevalent reason that older women do not receive breast and cervical cancer screening exams is due to physicians not recommending these screening tests. Health promotion education, regarding recommendations of breast and cervical cancer screening guidelines for older women, should be offered to primary care providers. Most primary care physicians feel unprepared in the health promotion role and unable to change patient's behavior (Wechsler, Levine, Idelson, Schor, & Coakley, 1996). The health promotion education could be presented jointly by a primary care physician and a nurse practitioner. Nurses are better prepared in education and collaboration with physicians is necessary to gain their support. Information presented could include (a) problem statement addressing the

significance of breast and cervical cancer in older women, (b) information regarding common barriers to accessibility and use of cancer screening faced by older women, and (c) outline of recommended frequency for breast and cervical cancer screening in older women.

The use of the Health Belief Model in guiding selection of educational materials in future research is recommended with caution. The HBM has a narrow scope which does not adequately examine the social, environmental, political, and cultural forces that shape an individual's behavior. Although the HBM has been used extensively in research related to breast cancer screening, the narrow scope may limit it's usefulness in future research.

Recommendations for future public policies include (a) Medicare reimbursement for yearly mammograms, (b) establishing state insurance laws that mandate reimbursement for yearly mammograms, and (c) government funding and/or third party reimbursement for mammograms and Pap smears for women at risk, i.e., low income, minority, elderly, rural populations.

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APPENDICES

APPENDIX A

Focus Group Discussion Guide

Focus Group Discussion Guide

(adapted from *Resources for Reaching Special Populations: Breast and Cervical Cancer Prevention and Control* by Centers for Disease Control and Prevention (1994).

Introduction

Interviewer introduces self then states the following, "A focus group is a small group discussion where 6 to 10 people are brought together to explore attitudes about a particular topic of interest. The topic we will be discussing today is your attitudes about women's health care needs. In a focus group, there are no right or wrong answers, only opinions and I am really interested in hearing from all of you. I want to encourage you to listen and respond to each other as well as to me. Feel free to disagree with each other. If you disagree with something that someone says, tell us so and why. I want to hear many points of view."

Warm Up

Interviewer: "I'd like to go around the room now and each of you tell us your first name and a sentence about yourself."

Background on Health

1. "Where do you go for health care treatment or advice and who do you see there?"
2. "Are there any medical tests or exams you get from your doctor or nurse to make sure you are healthy? Mammograms? Pap smears?"
3. "In an examination, does a doctor or a nurse examine your breasts? How often?"
4. "Who do you turn to for advice with a health problem?"

5. a. "Where do you get information about health that you trust? Doctors and nurses? Magazines, which ones? TV, which shows or commercials? Radio, which programs? Newspapers, which ones? Health fairs? Friends or family members? Health brochures or pamphlets?"

   b. "Whose advice is most likely to make you change how you take care of yourself?"

6. "What are health problems that concern you most?"

Cancer

"Some of you mentioned cancer as a health concern."

7. "What comes to mind when you hear the word "cancer"?

8. "What do you think happens to a person that gets cancer?"

9. "Do you think most people who get cancer are going to die from it?"

10. "Is there anything people can do to improve their chances of surviving cancer?"

Breast Cancer

11. "Now I'd like to move on and talk for a while about breast cancer which is a health concern that some women think about."

   a. "Is there anything that makes you feel more susceptible to breast cancer? Is breast cancer something that you personally need to worry about?"

   b. "What do you think are the best ways to find out if a woman has breast cancer? (Probe: mammograms, breast self-examination, breast exam by a health care provider.) How do all these compare? Are some better than others?"

   c. "What do you think are some reasons why women do not perform breast self-examinations, get clinical breast exams or mammograms?"

Cervical Cancer

"When we discussed health concerns, some of you mentioned cancer. Another kind of cancer that affects women is cervical cancer. Let's talk for a moment about cervical cancer."

12. a. "What is the best way to detect (find out if you have) cervical cancer?"

b. "Who do you think needs to get a Pap smear?"

c. "How often do you think women need Pap smears?"

d. "What do you think are some reasons some women don't get Pap smears?"

Strategies of Promotion of Breast Self-Examination, Clinical Breast Exams, Mammography, and Pap Smears

13. "Let's say we want to launch a campaign to provide information to older rural women regarding the importance of performing breast self-examination, obtaining clinical breast exams, mammography, and pap smears. This information will be presented at a booth set up at a rural county fair. You are in charge of deciding what it would take to convince women like yourselves to perform breast self-examination and obtain screening services including clinical breast exams, mammography, and pap smears. Let's brainstorm."

a. "What message (a few simple points) would you tell women in order to convince them it is important to obtain both breast and cervical cancer screening tests and exams?"

b. "Do you think brochures and/or pamphlets should be distributed at this fair? If so, how would you present the brochures or pamphlets so that women would want to pick them up?"

c. "Do you think videos should be presented at the fair? Do you think women would be offended by any nudity presented in a video or pamphlet?"

(*Present pamphlets, brochures, posters, and videos to focus group and obtain their opinions regarding this material.)

APPENDIX B

Resources

RESOURCES

Pamphlets and Brochures:

1. Cancer Tests You Should Know About: A Guide for People 65 and over. (93-3256/p052) National Cancer Institute, 31 Center Drive MSC 2580, Building 31 Room 10A16, Bethesda, MD 20892-2580. Phone # 1-800-4-CANCER.
This pamphlet describes cancer tests important for people ages 65 and older. It informs men and women of the exams they should be requesting when they schedule checkups with their doctors. It provides a checklist for men and women to record when the cancer tests occur, and it describes the steps to follow should cancer be found. (Cost: Free)

2. Are You 50 or Over? A Mammogram Could Save Your Life. (94-3418/p046) National Cancer Institute, 31 Center Drive MSC 2580, Building 31 Room 10A16, Bethesda, MD 20892-2580. Phone # 1-800-4-CANCER.
This easy-to-read brochure uses pictures to describe what will happen when a woman goes for a mammogram. (Cost: Free)

3. Having a Pelvic Exam and Pap Test. (95-3416/p047) National Cancer Institute, 31 Center Drive MSC 2580, Building 31 Room 10A16, Bethesda, MD 20892-2580. Phone # 1-800-4-CANCER. This brochure uses pictures to describe what a woman will experience when getting a Pap test and pelvic exam from a nurse or doctor. (Cost: Free)

4. The Pap Test: It Can Save Your Life! (94-3213/p048) National Cancer Institute, 31 Center Drive MSC 2580, Building 31 Room 10A16, Bethesda, MD 20892-2580. Phone # 1-800-4-CANCER. This easy-to-read brochure tells a woman the importance of getting a

Pap test. It explains who should request one, how often it should be done, and where to get the test. (Cost: Free)

5. The older you get, the more you need a mammogram. (5020) American Cancer Society, Montana Division, P.O. Box 1080, Billings, MT 59103-1080. Phone # 1-406-252-7111. This brochure discusses important reason to get a mammogram, what it is like to get a mammogram, where to get a mammogram, risk factors associated with breast cancer, and who should get a mammogram. (Cost: Free)

6. Chances are You Need a Mammogram: A Guide for Midlife and Older Women. (0123). American Cancer Society, Montana Division, P.O. Box 1080, Billings, MT 59103-1080. Phone # 1-406-252-7111. This brochure includes information about where to get a mammogram, how to get a good mammogram, how much a mammogram costs, what to expect when getting a mammogram, who should get a mammogram, and risk factors associated with breast cancer. (Cost: Free)

7. How to do Breast Self-Examination. (2088). American Cancer Society, Montana Division, P.O. Box 1080, Billings, MT 59103-1080. Phone # 1-406-252-7111. This brochure describes how to perform breast self-examination. (Cost: Free)

8. A Woman's Guide For Breast Care. Y-Me National Breast Cancer Organization, 212 West Van Buren, 4th Floor, Chicago, Illinois 60607. Phone # 1-800-221-2141. This brochure describes how to perform breast self-examination, information about mammograms, and risk factors associated with breast cancer. (Cost: $8.00 per 100)

Posters:

1. Poster Set: The Art of Early Detection. (g826) National Cancer Institute, 31 Center Drive MSC 2580, Building 31 Room 10A16, Bethesda, MD 20892-2580. Phone # 1-800-4-CANCER. This set of five posters are reproductions of art appropriate for the waiting rooms of clinics or doctors offices. They bear a message of the importance of regular screening mammography for women beginning at age 50. (Cost: Free).

Videos:

1. Woman To Woman: Straight Talk About Mammography. (2304.05) American Cancer Society, Montana Division, P.O. Box 1080, Billings, MT 59103-1080. Phone # 1-406-252-7111. This is a video on mammography for older women of all races, whose concerns about mammography are realistically depicted in it. (Cost: Free, 9:45 minutes)

2. Breast Self-Exam Techniques. Wyeth-Ayerst Laboratories, Philadelphia, PA 19101. This is a video on breast self-exam techniques. (Cost: Free, 10 minutes)

3. Taking Control of Your Health: The Pap Test and Cervical Cancer. (v541). National Cancer Institute, 31 Center Drive MSC 2580, Building 31 Room 10A16, Bethesda, MD 20892-2580. Phone # 1-800-4-CANCER. This 9-minute culturally appropriate, intertribal video explains the need for the Pap test for American Indian women. It features Native American health care and media professionals throughout. (Cost: Free)

APPENDIX C
Evaluation Form

PLEASE TELL US WHAT YOU THINK:

1. Did you find the health exhibit . . . .?

	very	somewhat	not at all
Helpful?	____	____	____
Informative?	____	____	____
Effective?	____	____	____

2. Were the videos . . . . ?

	very	somewhat	not at all
Helpful?	____	____	____
Informative?	____	____	____
Effective?	____	____	____

3. Additional comments about the health exhibit and videos: _____

_____

_____

_____

_____