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13. ABSTRACT ***(Maximum 200 Words)***
The purpose of this phase of a larger study was to obtain data about factors that explain screening mammogram referral patterns among physicians in Puerto Rico. It focused on compliance with 1997 NIH Guidelines to mammogram screening for women age 40 to 49 and 50 to 64. A self-administered questionnaire containing twelve hypothetical case studies and open questions was distributed to 50 physicians; 48 answered. Our hypothesis was: *Physicians will correctly follow the NIH screening mammogram guidelines for less than 90% of their female patients in each age category.* When comparing the physicians' responses with the NIH guidelines for women age 40 to 49 years old, 49.9% of the physicians coincided with the guidelines in recommending an annual exam if there are potential risk factors. For women age 50 to 64, 78% of the physicians recommended an annual mammogram according to the established guidelines. Our hypothesis was correct for both age categories: less than 90% of the physicians followed the NIH guidelines. For women age 40 to 49, where the guidelines are not as specific as for those 50 to 64 and physician-patient communication is highly recommended, the results for physicians following NIH guidelines were much less than anticipated.

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MAMMOGRAM COMPLIANCE AMONG LOW- INCOME, MIDDLE-AGED WOMEN IN PUERTO RICO

INTRODUCTION

Mammography for low-income and minority women is an important intervention issue as it is still under-utilized in these sectors. In 1997, the National Institutes of Health (NIH) made public the Consensus Statement regarding breast cancer screening for women age 40-49 and 50-69. The reaction of physicians and low-income women in terms of referrals for screening mammograms and compliance with the new mammogram screening guidelines still remains to be explored. This study aims to contribute information to this issue. It looks at compliance with the NIH screening mammogram guidelines for women age 40-49 and 50-64 for both clinicians and women. How these groups behave in terms of the guidelines is relevant for screening promotion interventions. This study focuses on compliance with the new guidelines among physicians and low-income, middle-aged women in Puerto Rico. Originally proposed for five years, this study proposed research and a translational experience involving the development of strategies to promote compliance with mammograms by the low-income middle-aged women. However, USAMRMC technical staff and Peer Review Panel recommendations to the original proposal made conducting the translational experience not possible. (Appendix 1.) The project agreed upon by all involved parties focuses on the research phase. The task and time distribution is as follows. The current report centers on Tasks 2 and 3.

REVISED STATEMENT OF WORK: DURATION 3 YEARS

TASK 1:SESSIONS WITH FOCUS GROUPS/EXPERIMENTAL DESIGN: Months 1 through 12

- Determination of sites for recruitment of samples
- Construct guidelines for focus group sessions (for physicians and women)
- Focus groups with low-income, middle-aged women (four focus groups)
- Focus group with clinicians (one focus group)
- Analysis of results from focus group sessions (physicians and women)
- Design clinician's interview schedule
- Design forms for data gathering from medical records
- Design and culturally adapt survey questionnaire for women
- Construct physicians' sampling frame
- Sample selection of physicians
- Questionnaire reproduction (physician's interview)
- Preparation of training for physician's interviewers and medical records reviewer
- Training of interviewers
- Training of medical record reviewer
- Develop coding and quality control procedures
- Submission of first annual report

TASK 2: INTERVIEWS WITH 50 PHYSICIANS/REVIEW OF 260 MEDICAL RECORDS: Months 13 through 24

- Interviews with physicians' sample
- Review of medical records
- Data entry and editing
- Incorporate changes resulting from cultural adaptation of survey questionnaire
- Data analysis of physicians' interviews and review of medical records
- Submission of second annual report
- Write first set of papers for presentation and/or publication

TASK 3: INTERVIEWS WITH 200 LOW-INCOME, MIDDLE-AGED WOMEN: Months 15 through 29

- Construct low-income middle-aged women survey's sampling frame
- Conduct sample selection of female participants
- Questionnaire reproduction (women's survey interview)

- Preparation of interviewer's manual and training of interviewers for women's sample
- Training of interviewers for women's sample
- Develop coding and quality control procedures
- Interview of sample of low-income middle-aged women

TASK 4: DATA ANALYSIS OF SURVEY: Months 25 through 36

- Data set up and coding
- Creation of files and programs
- Data entry and editing
- Data analysis
- Write second set of papers for presentation and/or publication (preliminary data on survey)
- Submission of final project report

BACKGROUND

Despite powerful scientific evidence in favor of breast cancer screening with mammograms and that screening has increased during the last five years, research indicates that mammogram compliance among specific sectors, such as low-income, minority, and women over 50 years of age has been slow (Rakowski et al. 1993; Rimer 1995). Many health professionals assume that if a practice has been demonstrated to be beneficial (i.e., early detection reduces cancer mortality), the general population will logically accept it and will implement it. Nonetheless, knowledge of the consequences of a behavior is not necessarily a deterrent of a specific conduct. Even though empowerment starts with knowledge, other factors are equally important to cause change and motivate action. Certain factors have been related to screening mammogram utilization among women in the United States, but none is more important than a physician's recommendation or referral (Dawson & Thompson 1990). Other predictors are: knowledge of the guidelines, belief in the potential curability of cancer or that screening is worthwhile, higher socioeconomic status, non-

minority status, and age below 50 (Champion 1994, Lacey 1993, NIH 1990, Rimer et al. 1989, Urban et al. 1994, Vernon et al. 1990, Zapka et al. 1993).

A survey of women age 65 and older conducted in Puerto Rico found that the primary reason for mammography compliance was the physician's referral (Sánchez-Ayéndez et al. 1997). Statistical analysis demonstrated that external factors were more significant than personal factors in terms of compliance with early detection of cancer behaviors. The analyses determined that the most significant factors for a woman to have a mammogram in the two years previous to the interview were related to the health care provider: having a referral from a physician, having received information from a health care provider about breast cancer and early detection after menopause, and having visited a gynecologist. Logistic regression analysis determined that the most significant factor was a referral from a physician.

There has been an increase in the number of women who have received regular screening for breast cancer; yet, specific sectors are not being screened (Burnett et al. 1995, Raja-Jones 1999). Access to mammograms is a problem for minority, low-income women, and for women over 50. Hispanic women's utilization of clinical breast exam (CBE) and mammogram are lower than that of their white and Afro American counterparts. The report "Healthy People 2000" indicated that in 1987, only 20% of Hispanic women age 40 or older in the U.S. had ever received a CBE or mammogram and set the objective to increase to 80% by the year 2000 all Hispanic women age 40 or older who undergo breast cancer tests. There is also a difference in utilization of screening mammograms between women of lower socioeconomic strata and those in upper levels. Barriers revolve around access, cost and education. There is a need for research focusing on compliance predictors for breast cancer screening in middle-aged women, particularly minorities and low-income

women, as well as on factors that affect a clinician's decision to follow the NIH[1] screening mammogram guidelines for women age 40 to 49 and 50 to 64.

For those involved in breast health promotion, it is essential to address how the needs of low-income and minority women are being met in order to comply with the screening guidelines. Most research has focused on barriers to services. Research has stressed that a main factor, if not the principal one, affecting mammogram compliance is lack of referral from a health care provider. In Puerto Rico, women cannot undergo a screening mammogram without a referral from a physician. Therefore, it becomes imperative to understand which factors affect a physician's compliance with established guidelines when recommending a screening mammogram and which factors affect a woman's decision, after she has received a referral, to have a mammogram. What factors do clinicians consider when recommending screening mammograms to women age 40 to 49 and 50 to 64? What variables are better predictors that a woman will have a mammogram once she receives a referral? How does a woman's self-assessment of breast cancer risks affect screening mammogram compliance? The answers to these questions stem from behavioral and sociocultural factors and must be considered when addressing the needs for services among low-income and minority women. Both sides of the issue, women and clinicians, must be investigated.

Mammography for low-income and minority women is an important health intervention issue. During the last two years, the debate relating to breast cancer screening guidelines, specifically mammograms, has been the center of controversies ever since NIH made public its Consensus Statement regarding breast cancer screening for women age 40 to 49 and 50 to 69. Guidelines indicate that the data currently available does not warrant a universal recommendation for

[1] 1997 National Institutes of Health Consensus Guidelines

mammography for all women in their forties. Each woman in this age group (40-49 years) should decide for herself whether to have a mammogram. Her decision may be based not only on an objective analysis of the scientific evidence and considerations about her individual medical history, but also how she perceives and weighs each potential risk and benefit, the values she places on each, and how she deals with uncertainty. For women over 50, the 1997 policy states they should undergo mammograms every one to two years beginning at age 50 (Christensen 1997). The reaction of physicians and low-income and minority women in terms of compliance with the new guidelines and referrals to screening mammograms remains to be explored. The proposed project will focus on compliance with the 1997 guidelines by physicians and low-income, middle-aged women (age 40 to 64) in Puerto Rico.

Understanding how a woman's self-risk assessment affects her decision to have a screening mammogram, once barriers such as access to medical services and a physician's referral are overcome, is an essential step in designing interventions (Jack et al. 1993, Lacey 1993, Rimer 1995) and one that is not often studied. Dolan (1995) found that among women who do receive a referral for a screening mammogram, low-income women are among those least likely to undergo the procedure. This project intends to contribute to the knowledge about a woman's decision, specifically low-income women, for having or not having a screening mammogram once she receives a referral from her physician. The results of this investigation will be helpful to develop recommendations to assess screening and risk factor control and to design interventions for low-income, middle-aged women.

RESEARCH QUESTIONS AND METHODS

The principal research questions for the duration of the three-year project are the following:

1. How does a woman's self-assessment of breast cancer risk affect compliance with a screening mammogram referral?

2. Are physicians adhering to the recommended NIH screening mammogram guidelines for women age 40 to 49 and 50 to 64?

This investigation aims to understand which variables are better predictors of screening mammogram compliance among low-income, middle-aged women in Puerto Rico, once they have received a physician's referral, and which factors could be affecting physicians' compliance with current NIH screening mammography guidelines.

Two geographic areas were selected for the study, a large metropolitan area and a non-metropolitan area. One health center in each geographical area was selected. The health center in the metropolitan area was located in the inner city and the health center selected for the non-metropolitan area was located on the northeast coast of Puerto Rico[2]. The researchers explained the objectives of the study to the administrative officials at each health center and the required procedures for consent and confidentiality were followed. The research team had excellent support from the health centers' administrators and personnel, which facilitated carrying out the tasks of the study.

During the first year of the project, focus groups were conducted to gain insight about screening knowledge and attitudes about breast cancer, screening practices, and barriers to screening mammograms for low-income women age 40 to 64. With the information obtained from the focus groups, a culturally and socially sensitive questionnaire was developed and administered to the

[2] The names of the centers are not mentioned in order to maintain confidentiality.

sample of low-income, middle-aged women in the two selected sites during the second year of the project.

A focus group with physicians was also conducted during the first year to obtain feedback on a questionnaire designed to investigate the physicians' knowledge of current guidelines for the age groups under consideration. The instrument was comprised of hypothetical case studies and open-ended questions on practices pertaining to knowledge of NIH guidelines, practices pertaining to screening guidelines, and attitudes toward the patient-physician relationship. The self-administered questionnaire was distributed to physicians from both participating health centers during the second year of the project. Physicians from two nearby health centers with client populations comparable to the two originally selected centers had to be incorporated in the sample in order to attain the required number of physicians. However, only women attending the original two health centers were selected for the survey.

The research team originally intended to ask permission from the participating physicians to examine a random number of records to document referrals to screening mammograms and to associate referrals to women's breast cancer risk factors and physicians' attitudes toward the client-health provider relationship. However, this was not possible because different physicians treated the women and, as such, the patterns for a specific physician were impossible to ascertain. Also, not all physicians had been working at the participating health centers since the study's selected start date of January 1998. The medical directors of the health centers gave permission for the reviews of records in order to identify women that would eligible for the random sample of 200 women for the survey. Women who met the following criteria were eligible:

- age 40 to 64 in 1998

- had received a referral for a screening mammogram since January 1998

Minor changes, resulting from the cultural adaptation of the questionnaire, were incorporated into the instrument. The instrument was divided into the following sections: (Appendix 2)

- social and demographic characteristics
- health history
- knowledge and attitudes toward breast cancer and mammography
- access to services
- perception of patient-physician relationship
- knowledge of available services for mammograms

OBJECTIVES

The objectives for the second year of the project, which is the focal point of this annual report, are as follows:

- To obtain qualitative and quantitative data about factors that explain screening mammogram referral patterns among physicians.
- To obtain quantitative data about factors that affect compliance with screening mammograms in order to determine the importance for low-income, middle-aged Puerto Rican women's self-assessment of breast cancer risks.

This report focuses on the physicians' self-administered questionnaire, the selection of a sample of female participants, and the interviews of the selected sample of low-income, middle-aged women. Data analysis will be presented in a future report.

RESEARCH METHODS

I. Physicians: Self-Administered Questionnaire

Purpose

The main purpose of this phase of the study was to obtain quantitative and qualitative data about factors that explain screening mammogram referral patterns among physicians. It would also determine if referal patterns followed the guidelines for mammogram recommended for women age 40 to 49 and 50 to 64 established in 1997 by NIH.

Sample selection

The sample of physicians was selected from health centers in two geographical areas (metropolitan and non-metropolitan) as defined in the first phase of the project. For the metropolitan area, health centers located in the municipality of San Juan were selected as it is the capital of Puerto Rico. San Juan is an area with a dense population, and the area that has more health centers when compared to other municipalities on the island. In the non-metropolitan area, health centers in three municipalities located on the northeast coast of Puerto Rico were selected. For the physicians' study, an initial contact was made by telephone with the medical directors and executive directors of the health centers. They were informed about the purpose of the project and the project's interest in the participation of primary physicians from each center. A formal letter was sent with a detailed explanation of the project's objectives and a brief description of the format for the physicians' interview. A formal request was also made for a list of the names and specialties of the primary physicians who offer services in each center. All physicians who provided services in one of the two geographically defined health centers with one of the following specialties were considered eligible for the study:

- General Medicine
- Family Medicine
- Gynecology/Obstetrics
- Internal Medicine

A total of 50 primary physicians who offered services in one of the two selected geographic areas were selected, 25 from the metropolitan area and 25 from the non-metropolitan area. All of the participating physicians provided services in a health center, including the two health centers that were used to identify the medical records for the review and determination of eligibility for the sample of middle-aged women who were interviewed.

Instrument

The instrument used to obtain information from the physicians was modified after the discussion of other instruments with experts and the results of the physicians' focus group conducted during the first phase of the project. The self-administered questionnaire consisted of three parts: brief demographic data, twelve case studies, and five open-ended questions (Appendix 3). The instrument was first administered to physicians' participating in a focus group during the first year of the project (first Annual Report) and changes were made based on this session. The purpose of this instrument was to obtain data about the physicians' knowledge of the 1997 NIH guidelines for mammogram's referral in clinical settings and to study the factors that explain referral patterns for screening mammograms for women age 40 to 49 and 50 to 64 years. The questionnaire took approximately 15 minutes to complete.

Procedures

An interviewer was appropriately trained to carry out the procedure of distributing and collecting the questionnaires in the health centers. The process of questionnaire distribution began in the metropolitan area. The interviewer first visited the health center in order to verify that the physicians were eligible and were still providing services at this health center and to determine the most convenient time to contact the physician. The interviewer received a Participant Control Card (PCC) for each center (Appendix 4). The PCC contained information about the health center and the names of the physicians who provided services at the center, the medical specialty and a corresponding control number. The interviewer registered the contacts with each physician on the PCC and the date of distributing and collecting the questionnaire. If a physician no longer provided services at this health center but offered services at the another center in the same geographic area, an attempt was made to locate the physician at the other health center. If the physician no longer offered services in the same geographic area, this physician was not eligible and thus was not included in the study. On the other hand, if the interviewer encountered a physician who was not on the initial list provided by the health center director, but the physician met the inclusion criteria for the study, the name was added to the PCC and the physician was invited to participate in the study.

The first contact with the physician was always face to face. The interviewer coordinated with the nurse the best time to visit the physician. During the visit, the interviewer explained the project's general objectives and the contents of the questionnaire to the physician. If the physician agreed to participate in the study, she or he was given a copy of the informed consent form and the questionnaire and a date was arranged for the interviewer to collect the completed questionnaire. The first option offered to the physician was to complete the questionnaire during this first visit. If

this was not possible, a follow-up visit was arranged for the interviewer to collect the completed questionnaire. When the questionnaire was collected, the physician or nurse was given educational materials about breast cancer and different methods of prevention for their patients to read while waiting for medical appointments.

The physicians' interview phase lasted approximately two months. It was necessary to leave reminders for some of the physicians and some were not in their offices on the day that had been arranged for collecting the questionnaire.

Results

The entering and management of compiled data for the physicians' interviews were carried out with the Epi Info Version 6 program. Fourty eight (48) primary physicians completed and returned the questionnaire, a response rate of 96%. Of these 48 physicians, 52.1% were from the metropolitan area and 47.9% were from the non-metropolitan area (Table 1).

TABLE 1. FREQUENCY DISTRIBUTION OF PARTICIPATING PHYSICIANS BY GEOGRAPHIC AREA

GEOGRAPHIC AREA	NUMBER	PERCENT (%)
METROPOLITAN AREA	25	50.0
NON-METROPOLITAN AREA	23	46.0
NON-RESPONSE	2	4.0
TOTAL	50	100

Twenty-nine (60.4%) of the participating physicians were male. The average age of the participants was 45.8 years old; the youngest physician was 30 years old and the oldest 71. The most frequent specialty of the participating physicians was general medicine, a total of 39.6 percent or 19 of 48 physicians (Table 2). Two of the participants had specialized studies in the area of gerontology.

TABLE 2. DISTRIBUTION OF FREQUENCY OF PARTICIPATING PHYSICIANS BY MEDICAL SPECIALTY

MEDICAL SPECIALTY	NUMBER	PERCENT (%)
GENERAL MEDICINE	19	39.6
GYNECOLOGY/OBSTETRICS	10	20.8
INTERNAL MEDICINE	10	20.8
FAMILY MEDICINE	9	18.8
TOTAL	48	100

Discussion of individual case studies

Following is a brief discussion of the physicians' responses to each individual case study.

CASE #1

41 year-old architect (G3P3A0)[3]; first pregnancy at age 26. Her mother died of pulmonary embolism at age 59; her father died of laryngeal cancer at age 72. She is very afraid of radiation and asks if she could wait until age 50 to get her first mammogram. [Research team evaluation: Woman younger than 50 without symptoms or risk factors.]

In this case, the majority of the physicians (81.3%) recommended that the patient should have a screening mammogram. Fifty percent of the physicians did not recommend a diagnostic mammogram and 45.8% did not recommend a referral for sonomammography. Follow-up through breast self-exams (BSE) and clinical breast exams (CBE) were recommended by 70.8 % of the physicians (Table 3A).

[3] For all cases in this section, G = number of gestations; P = childbirths; A = abortions or miscarriages.

Table 3A. Test Recommended by Physician (N=48)

Test	Yes (%)	No (%)	No answer (%)
Screening	81.3	12.5	6.3
Diagnostic	4.2	50.0	43.8
Sonomammogram	10.4	45.8	43.8
Follow-up BSE/CBE	70.8	12.5	16.7

* physicians could offer more than one answer

As to the reasons for recommending different tests, 87.5% of the physicians indicated that the reason for referral for a test was the age of the patient. Risk factor was the reason for recommending a test for 37.5% of the physicians while 8.3% recommended a test due to signs or symptoms (Table 3B).

TABLE 3B. REASON FOR REFERRAL (N= 48)

Reason for referral	Yes (%)	No (%)	No answer (%)
Age	87.5	4.2	8.3
Risk factor	37.5	37.5	25.0
Symptoms or signs	8.3	50.0	41.7

* physicians could offer more than one answer

Of the 85.7 % of the physicians who recommended a test because of the age of the case, only 47.6% specified the reason for which a referral was given. The majority of the physicians (60.0%) indicated that the reason for the referral was that the patient was older than 40. Among physicians who gave referrals based on risk factors, only 25.0% specified the reason, indicating cancer for a family member as the most important risk factor for recommending a test (75.0%). Only one physician who recommended a test because of the signs and symptoms gave a specific reason for this referral (Table 3C).

TABLE 3C. SPECIFIC REASON FOR REFERRAL (N=48)

Reason for Referral	Specific Reason		Percent (%)
Age	(N=42)	≤ 40 years	35.0
		> 40 years	60.0
		Other criteria not specified	5.0
Risk Factor	(N=18)	Cancer in a family member	75.0
		Late first pregnancy	12.5
		Hereditary factor	12.5
Symptoms or signs	(N=4)	Palpable mass	100.0

* physicians could offer more than one answer

CASE #2

48 year-old Colombian immigrant (G4P4A0), housewife, first pregnancy at age 16. Arrived in Puerto Rico in 1994, but does not have medical insurance. She states that she has never been sick before but is very concerned because a paternal aunt was diagnosed with breast cancer last month. [Research team evaluation: Woman younger than 50 without symptoms or strong risk factors.]

A screening mammogram was recommended by 85.4% of the physicians. Only 16.7% of the physicians recommended a diagnostic mammogram whereas 47.9% did not recommend one. Sonomammography was recommended by 37.5% of the physicians even though this patient did not present any risk factors or symptoms. Over two-thirds of the physicians (68.8%) recommended follow-up through self and clinical breast exams (Table 4A).

TABLE 4A. TEST RECOMMENDED BY PHYSICIAN (N=48)

Test	Yes (%)	No (%)	No answer (%)
Screening	85.4	6.3	8.3
Diagnostic	16.7	47.9	35.4
Sonomammogram	37.5	8.3	54.2
Follow-up BSE/CBE	68.8	10.4	20.8

* physicians could offer more than one answer

In terms of reasons for recommending the tests, 79.2% of the participating physicians recommended a referral due to the age of the case. When evaluating this case in terms of risk factors, signs and symptoms, 66.7% of the physicians recommended a test due to risk factors, while only 4.2% recommended a test for signs or symptoms (Table 4B).

TABLE 4B. REASON FOR REFERRAL (N=48)

Reason for referral	Yes (%)	No (%)	No answer (%)
Age	79.2	4.2	16.7
Risk factor	66.7	20.8	12.5
Signs or symptoms	4.2	50.0	45.8

* physicians could offer more than one answer

Of the physicians who recommended a test due to the age of the case, 18.4% specified the reason. Only eight of the 32 physicians (25.0%) who recommended a test due to risk indicated their reason to recommend a referral, indicating family or genetic history even though this woman's family history was breast cancer for a paternal aunt. None of the physicians who recommended a test due to signs or symptoms specified the reason for giving a referral (Table 4C).

TABLE 4C. SPECIFIC REASON FOR REFERRAL

Reason for referral	Specific Reason		Percent (%)
Age	(N=7)	>35	10.0
		≥40	30.0
		Age	20.0
Risk factor	(N=8)	Family history	88.0
		Hereditary factor	12.5
Signs or symptoms	(N=0)	No answer recorded	00.0

* physicians could offer more than one answer

Case #3

62 year-old housewife (G2P2A0) with a negative mammogram two months ago. Complains of pain in left breast ever since her 1½ year-old grandson "kicked" her in this breast five weeks ago. The breast is red, indurated and looks larger than the right breast. [Research team evaluation: Woman older than 50 with symptoms.]

Only 12.8% of the physicians recommended a screening mammogram for this case, whereas 46.8% did not recommend one and 40% did not provide any response. One-third of the physicians recommended a diagnostic mammogram and 35.4% did not recommend any test. A sonomammogram was recommended by 31.3% while 37.5% did not recommend one. Follow-up with self and clinical breast exams was recommended by 64.6% of the physicians (Table 5A).

TABLE 5A. TEST RECOMMENDED BY PHYSICIAN (N=48)

Test	Yes (%)	No (%)	No answer (%)
Screening	12.8	46.8	40.4
Diagnostic	33.3	35.4	31.3
Sonomammogram	31.3	37.5	31.3
Follow-up BSE/CBE	64.6	18.8	16.7

* physicians could offer more than one answer

In this specific case study, one third of the physicians' recommended a mammogram, one third did not and the rest did not answer. When evaluating the patient's risk factors, more physicians did not recommend any test based on risk factor than those that did recommend one. A significant majority (72.9%) of the physicians recommended a test for reasons relating to symptoms or signs (Table 5B).

TABLE 5B. SPECIFIC REASON FOR REFERRAL (N=48)

Reason for Referral	Yes (%)	No (%)	No answer (%)
Age	31.3	33.3	35.4
Risk factor	22.9	31.3	45.8
Signs or symptoms	72.9	10.4	16.7

* physicians could offer more than one answer

Of the physicians who recommended a test due to a sign or symptoms, only four physicians (11.4%) specified their reason for the referral. Only two of the physicians who recommended a test due to patient's age (31.3%), specified their reasons and indicated that the patient was 62 years old. On the other hand, only two of the eleven physicians who recommended a test due to a risk factor indicated their reasons for making a referral (Table 5C).

TABLE 5C. SPECIFIC REASON FOR REFERRAL

Reason for Referral	Specific Reason		Percent (%)
Age	(N=2)	Age 62	100.0
Risk factor	(N=2)	Mastitis Breast trauma	50.0 50.0
Signs or symptoms	(N=4)	Trauma Mastitis Trauma with recent negative mammogram	50.0 25.0 25.0

* physicians could offer more than one answer

Case #4

40 year-old secretary (G1P1A0) who gave birth at age 33 and visits her gynecologist regularly. At each check-up, she receives a clinical breast exam; the last exam was negative. Two weeks ago she found a dark spot on her bra. Squeezing the nipple produced a drop of reddish liquid. [Research team evaluation: Woman younger than 50 with signs and symptoms.]

Two-fifths of the participating physicians (39.6%) recommended a screening mammogram while nearly one-third did not consider it appropriate. A diagnostic mammogram was recommended by 68.8% of the physicians. In terms of referrals for sonomammography, 29.2% did not recommend a referral for this test while 45.8% did not indicate any response. The majority of the physicians (56.3%) recommended follow-up through self and clinical breast exams but one-third of the physicians did not provide responses about follow-up BSE/CBE even though the patient showed signs and symptoms (Table 6A).

TABLE 6A. TEST RECOMMENDED BY PHYSICIAN (N=48)

Test Recommended	Yes (%)	No (%)	No answer (%)
Screening	39.6	31.25	29.2
Diagnostic	68.8	8.3	22.9
Sonomammogram	25.0	29.2	45.8
Follow-up BSE/CBE	56.3	10.4	33.3

* physicians could offer more than one answer

In terms of the reasons for recommending a test, 56.3% of the physicians indicated that the reason for referral was the age of the patient. When evaluating risk factors and signs and symptoms, the majority of the physicians recommended a test due to risk factor and 85.4% recommended a referral for signs and symptoms (Table 6B).

TABLE 6B. REASON FOR REFERRAL (N=48)

Reason for referral	Yes (%)	No (%)	No answer (%)
Age	56.3	14.6	29.2
Risk factor	41.7	25.0	33.3
Signs or symptoms	85.4	8.3	6.3

* physicians could offer more than one answer

Of the 56.3 % of the physicians who recommended a test because of age, only six (22.2%) specified the reason for giving the referral. Of the physicians who recommended a test due to risk

factor, only 15.0% specified the reason. Only seven physicians (17.1%) who recommended a test due to signs or symptoms specified their reasons for a referral in this case, the reason being bleeding (Table 6C).

TABLE 6C. SPECIFIC REASON FOR REFERRAL

Reason for Referral	Specific Reason		Percent (%)
Age	(N=6)	>40	50.0
		>35	16.7
		Age	33.3
Risk factor	(N=3)	Pregnancy >30 years old	33.3
		Late pregnancy	33.3
		Pregnancy at 33 years of age	33.3
Signs or symptoms	(N=7)	Bleeding	37.5
		Diagnostic of introductal papiloma	12.5
		Eliminate possibility of ductal cancer	12.5
		Secretion	12.5
		Symptoms	12.5

* physicians could offer more than one answer

Case #5

45 year-old executive who keeps herself very slim with a vegetarian diet and sports; participates in civic and cultural activities. [Research team evaluation: Woman younger than 50 with no symptoms and has risk factor.]

A screening mammogram was recommended by 83.0% of the physicians in this case. As far as referrals for a diagnostic mammogram, 6.3% of the physicians did recommend this test and 48% did not respond. Sonomammography was not recommended by 43.8% of the physicians while 45.8% did not respond to this question. A majority of the physicians (60.4%) recommended follow-up through self and clinical breast exams (Table 7A).

TABLE 7A. TEST RECOMMENDED BY PHYSICIAN (N=48)

Test	Yes (%)	No (%)	No answer (%)
Screening	83.0	4.3	12.8
Diagnostic	6.3	45.8	47.9
Sonomammogram	10.4	43.8	45.8
Follow-up BSE/CBE	60.4	16.7	22.9

* physicians could offer more than one answer

The majority of the physicians recommended a mammogram due to the patient's age. When evaluating the case in terms of risk factors, 39.6% of the physicians recommended a test. When considering signs or symptoms, the majority of the physicians (47.9%) did not recommend any test (Table 7B).

TABLE 7B. REASON FOR REFERRAL (N=48)

Reason for referral	Yes (%)	No (%)	No answer (%)
Age	81.3	6.3	12.5
Risk factor	39.6	18.8	41.7
Signs or symptoms	4.2	47.9	47.9

* physicians could offer more than one answer

None of the physicians who indicated that they would have recommended a test due to signs or symptoms exhibited in this case specified their reason for the referral. Of the physicians who recommended a test due to age (81.3%), only nine (23.0%) specified their reasons. Only four of the nineteen physicians who recommended a test due to risk factors indicated the reason for giving a referral (Table 7C).

TABLE 7C. SPECIFIC REASON FOR REFERRAL

Reason for Referral		Specific Reason	Percent (%)
Age	(N=9)	>40	88.8
		>35	11.1
Risk factor	(N=4)	Never pregnant	50.0
		Nulliparity	50.0
Signs or symptoms	(N=2)	No answer recorded	00.0

* physicians could offer more than one answer

Case #6

64 year-old widow (G1P1A0) with Diabetes Mellitus, dependent on insulin since age 41and obese. Patient had recently been diagnosed with Alzheimer and her daughter is going to put her in a home for the elderly. Her only insurance is Puerto Rico Health Reform4. [Research team evaluation: Woman older than 50 with no symptoms or strong risk factor, except age.]

A screening mammogram was recommended by 79.2% of the physicians. A small minority recommended a diagnostic mammogram or a sonomammogram for this patient with no symptoms whose major risk factor is age. The majority of the physicians (54.2%) recommended follow-up through self and clinical exams (Table 8A).

TABLE 8A. TEST RECOMMENDED BY PHYSICIAN (N=48)

Test	Yes (%)	No (%)	No answer (%)
Screening	79.2	4.2	16.7
Diagnostic	12.5	43.8	43.8
Sonomammogram	6.3	45.8	47.9
Follow-up BSE/CBE	54.2	16.7	29.2

* physicians could offer more than one answer

A mammogram was recommended by 83.3% of the physicians due to the age of the patient. When evaluating this case for risk factors, 36.9% of the physicians recommended a test due to risk factors. When considering the signs and symptoms presented in this case, the majority of the physicians (47.9%) recommended a test (Table 8B).

TABLE 8B. REASON FOR REFERRAL (N=48)

Reason for Referral	Yes (%)	No (%)	No answer (%)
Age	83.3	6.3	10.4
Risk factor	36.9	20.8	39.6
Signs or symptoms	4.2	47.9	47.9

* physicians could offer more than one answer

4 Government of Puerto Rico's Health Insurance for indigents.

Of the physicians who recommended a test due to a signs or symptoms, none specified their reason for the referral. Of the physicians who recommended a test due to the women's for age (83.3%), only eight (20.0%) specified their reasons. Only three of the nineteen physicians who recommended a test due to risk factors indicated their reasons for the referral (Table 8C).

TABLE 8C. SPECIFIC REASON FOR REFERRAL

Reason for Referral		Specific Reason	Percent (%)
Age	(N=8)	64 years old	50.0
		>40	25.0
		>50	12.5
		>35	12.5
Risk factor	(N=3)	Obesity	66.6
		Only one pregnancy	33.3
Signs or symptoms	(N=0)	No response recorded	00.0

* physicians could offer more than one answer

Case #7

43 year-old housewife (G6P5A1) whose first pregnancy was at age 17. Patient says that she has fibrocystic disease but has not had a breast biopsy. [Research team evaluation: Woman younger than 50 with no symptoms or risk factors.]

The majority of the physicians (66.7%) recommended a screening mammogram. A diagnostic mammogram was recommended by 37.5% of the physicians where as sonomammography was recommended by 35.4% of the physicians. The majority of the physicians (66.7%) also recommended follow-up through self exams and clinical exams (Table 9A).

TABLE 9A. TEST RECOMMENDED BY PHYSICIAN (N=48)

Test	Yes (%)	No (%)	No answer (%)
Screening	66.7	12.5	20.8
Diagnostic	37.5	29.2	33.3
Sonomammogram	35.4	31.3	33.3
Follow-up BSE/CBE	66.7	6.3	27.1

* physicians could offer more than one answer

The majority of the physicians (72.9%) recommended a test based on the age of the woman in this case study. When evaluating the risk factors for this patient, half of the physicians (50.0%) recommended a test, as they considered the fibrocystic disease a risk factor. When considering the signs and symptoms presented in this case, 45.8% of the physicians recommended a test (Table 9B).

TABLE 9B. REASON FOR REFERRAL (N=48)

Reason for referral	Yes (%)	No (%)	No answer (%)
Age	72.9	10.4	16.7
Risk factor	50.0	22.9	27.1
Signs or symptoms	45.8	29.2	25.0

* physicians could offer more than one answer

Of the physicians who recommended a test due to their interpretation of signs or symptoms presented by this patient, only two (9.0%) specified their reasons for giving the referral. For the physicians who recommended a test due to the patient's age (72.9%), only six (17.1%) specified their reasons. Only four of the twenty-four physicians (16.7%) who recommended a test due to risk factors indicated their reasons for the referral; the most frequent reason was pregnancy during adolescence (Table 9C).

TABLE 9C. SPECIFIC REASON FOR REFERRAL

Reason for Referral	Specific Reason		Percent (%)
Age	(N=6)	>40	83.3
		>35	16.6
Risk factor	(N=4)	Early-aged pregnancy	50.0
		Fibrosis	25.0
		Multiparity	25.0
Signs or symptoms	(N=2)	Previous diagnostic	50.0
		Fibrocystic disease	50.0

* physicians could offer more than one answer

Case #8

18 year-old student who has been sexually active since age 15 presents an egg-like mass in the lower inner quadrant of the left breast. [Research team evaluation: Woman younger than 50 with symptoms.]

In this case, 40.4% of the physicians did not recommend a screening mammogram while 60.4% recommended a diagnostic mammogram. Nearly two-thirds of the physicians recommended sonomammography. In terms of follow-up for the patient, slightly more than three-fifths of the physicians (62.5%) recommended self and clinical breast exams (Table 10A).

TABLE 10A. TEST RECOMMENDED BY PHYSICIAN (N=48)

Test	Yes (%)	No (%)	No answer (%)
Screening	8.5	40.4	51.1
Diagnostic	60.4	12.5	27.1
Sonomammogram	64.6	14.6	20.8
Follow-up BSE/CBE	62.5	12.5	25.0

* physicians could offer more than one answer

In regards to the reasons for recommending a test, the vast majority of the physicians indicated symptoms --given the egg-like mass in the lower inner quadrant of the left breast presented by the patient in this case-- as the reason for their recommendation. (Table 10B).

TABLE 10B. REASON FOR REFERRAL (N=48)

Reason for referral	Yes (%)	No (%)	No answer (%)
Age	12.5	45.8	41.7
Risk factor	22.9	37.5	39.6
Signs or symptoms	93.8	4.2	2.1

* physicians could offer more than one answer

A test due to the signs or symptoms of the patient was recommended by 93.8% of the physicians of whom 17.7% specified their reason for giving a referral; the majority indicated the egg-like mass. Of the physicians who recommended a test due to age (12.5%), only two (9.0%) specified

their reasons. Only one physician who recommended a test due to risk factors indicated nulliparity as the reason for giving a referral (Table 10C).

TABLE 10C. SPECIFIC REASON FOR REFERRAL

Reason for Referral	Specific Reason		Percent (%)
Age	(N=2)	Age	50.0
		Young for radiation	50.0
Risk factor	(N=1)	Nulliparity	100.0
Signs or symptoms	(N=8)	Diagnosis of fibroadenoma	12.5
		Some type of malignancy	12.5
		Lump	62.5
		Other	12.5

* physicians could offer more than one answer

Case #9

40 year-old teacher (G2P2A0) with a history of Hodgkin's disease in the mediastinum, treated with radiation therapy at age 13. Patient has annual follow-up visits. [Research team evaluation: Woman younger than 50 with no risk factor.]

In this case, 75.0% of the physicians recommended a screening mammogram. In terms of referrals for a diagnostic mammogram, 33.3% of the physicians did not recommend this test and 45.8% did not respond to the question. Only one-fifth of the participating physicians recommended a diagnostic mammogram. On the other hand, 34.5% of the physicians did not recommend sonomammography either. In terms of follow-up for this patient, the majority of the physicians (70.8%) recommended self and clinical breast exams (Table 11A).

TABLE 11A. TEST RECOMMENDED BY PHYSICIAN (N=48)

Test	Yes (%)	No (%)	No answer (%)
Screening	75.0	6.3	16.7
Diagnostic	20.8	33.3	45.8
Sonomammogram	31.3	35.4	33.3
Follow-up BSE/CBE	70.8	10.4	18.8

* physicians could offer more than one answer

Of the reasons for recommending a particular test, 68.8% of the physicians considered the age of the woman in this case study (40 years old) as a factor for the mammogram referral. When evaluating the possible risk factors of the patient, 77.1% of the physicians recommended a test taking these factors into consideration. When considering signs or symptoms, most of the physicians (43.8%) did not recommend any test (Table 11B).

TABLE 11B. REASON FOR REFERRAL (N=48)

Reason for Referral	Yes (%)	No (%)	No answer (%)
Age	68.8	14.6	16.7
Risk factor	77.1	12.5	10.4
Signs or symptoms	12.5	43.8	43.8

* physicians could offer more than one answer

Of those physicians who recommended a test due to signs or symptoms (12.5%), only one specified the reason for the referral, the possibility of a nodule. Of the physicians who recommended a test due to age (68.8%), 15% specified the reason. Only six of the thirty-six physicians who recommended a test due to risk factors indicated the reason for the referral (Table 11C).

TABLE 11C. SPECIFIC REASON FOR REFERRAL

Reason for Referral	Specific Reason		Percent (%)
Age	(N=5)	≥40	60.0
		>35	20.0
		Age	20.0
Risk factor	(N=6)	Radiation	50.0
		Hodgkin's Disease	33.3
		History	16.7
Signs or symptoms	(N=1)	Possible palpable nodule	100.0

* physicians could offer more than one answer

Case # 10

28 year-old nurse (G0P0A0) with a history of thelarche during childhood. Patient does not complain of any breast discomfort but is considering undergoing surgery to increase breast size. [Research team evaluation: Woman younger than 40 with no symptoms and a potential for exposure to hormone treatment (thelarche) in childhood.]

A screening mammogram was recommended by 43.8% of the physicians. A diagnostic mammogram was not recommended by 45.8% of the physicians, nor did 45.8% of the physicians answer this question. Only 18.8% of the physicians recommended sonomammography. Three-fifths of the physicians recommended follow-up with self and clinical breast exams (Table 12A).

TABLE 12A. TEST RECOMMENDED BY PHYSICIAN (N=48)

Test	Yes (%)	No (%)	No answer (%)
Screening	43.8	33.3	22.9
Diagnostic	8.3	45.8	45.8
Sonomammogram	18.8	39.6	41.7
Follow-up BSE/CBE	60.4	20.8	18.8

* physicians could offer more than one answer

The majority of the physicians (52.1%) did not consider the age of this patient an important factor for referring for a detection test. Only a minority (8.3%) considered that age was important. When evaluating the case in terms of risk factors, 33.3% of the physicians did not recommend any test due to the patient's risk factors, but 37.5% of the physicians opted to not answer this question. Nor did the physicians consider that signs or symptoms for this patient were relevant for recommending a referral (Table 12B).

TABLE 12B. REASON FOR REFERRAL (N=48)

Reason for Referral	Yes (%)	No (%)	No answer (%)
Age	8.3	52.1	39.6
Risk factor	29.2	33.3	37.5
Signs or symptoms	12.5	43.8	43.8

* physicians could offer more than one answer

Of the physicians who recommended a test due to age, only one specified the reason. Only four of the fourteen physicians who recommended a test due to risk factors indicated the specific reasons for the referrals: nulliparity and thelarche. None of the physicians who considered that the symptoms presented in this case as reasons for referrals offered specific reasons (Table 12C).

TABLE 12C. SPECIFIC REASON FOR REFERRAL

Reason for Referral	Specific Reason		Percent (%)
Age	(N=1)	No risk for age	100.0
Risk factor	(N=4)	Nulliparity	50.0
		Thelarche	50.0
Signs or symptoms	(N=0)	No response recorded	00.0

* physicians could offer more than one answer

Case # 11

41 year-old journalist (G6P4A2) who had a breast biopsy five years ago. The pathological diagnosis was atypical hyperplasia. [Research team evaluation: Woman younger than 50 with no symptoms and a strong risk factor (atypical hyperplasia).]

A screening mammogram was recommend by 64.6 % of the physicians in this case. A diagnostic mammogram was recommended by 41.7% of the physicians for this woman with atypical hyperplasia and prior biopsy. One-third of the participating physicians considered

sonomammography necessary and three-fourths of the physicians recommended follow-up through self and clinical breast exams (Table 13A).

TABLE 13A. TEST RECOMMENDED BY PHYSICIAN (N=48)

Test	Yes (%)	No (%)	No answer (%)
Screening	64.6	10.4	25.0
Diagnostic	41.7	27.1	31.3
Sonomammogram	33.3	33.3	33.3
Follow-up BSE/CBE	75.0	2.1	22.9

* physicians could offer more than one answer

In terms of the reasons for recommending a particular test, the majority of the physicians (70.8%) did not consider age an important factor for a referral. When evaluating this case in terms of risk factors, the vast majority of the physicians (93.8%) recommended a test due to their interpretation of the risk factors presented (i.e., prior biopsy and hyperplasia). When considering the signs and symptoms presented in this case, only 14.6% of the physicians considered any test necessary (Table 13B).

TABLE 13B. REASON FOR REFERRAL (N=48)

Reason for Referral	Yes (%)	No (%)	No answer (%)
Age	10.4	70.8	18.8
Risk factor	93.8	6.3	0.00
Signs or symptoms	14.6	37.5	47.9

* physicians could offer more than one answer

Of the physicians who recommended a test due to signs or symptoms (14.6%), none specified the reason for the referral. Of the physicians who recommended a test due to the age of the patient (10.4%), all specified their reasons. Only nine of the forty-five physicians who recommended a test due to risk factor indicated the reason for this referral (Table 13C).

TABLE 13C. SPECIFIC REASON FOR REFERRAL

Reason for Referral	Specific Reason		Percent (%)
Age	(N=5)	≥40	60.0
		>35	20.0
		Age	20.0
Risk factor	(N=9)	Hyperplasia	55.5
		Biopsy and previous diagnosis	33.3
		Previous history	11.1
Signs or symptoms	(N=0)	No response recorded	0.00

* physicians could offer more than one answer

Case # 12

47 year-old minister (G4P3A1). Her 28 year-old daughter was diagnosed with breast cancer two weeks ago. Last week, the daughter was informed that the BRCA1 test was positive. [Research team evaluation: Woman younger than 50 with no symptoms and a strong risk factor (BRCA1)]

A screening mammogram was recommended by 72.9% of the physicians in this case study. A smaller percentage of the physicians (33.3%) did not recommend a diagnostic mammogram. Sonomammography was not recommended by 43.8% of the physicians. A majority of the physicians (58.3%) recommended self and clinical breast exams, while nearly one-third did not answer if BSE or CBE were recommendable in this case (Table 14A).

TABLE 14A. TEST RECOMMENDED BY PHYSICIAN (N=48)

Test	Yes (%)	No (%)	No answer (%)
Screening	72.9	10.4	16.7
Diagnostic	29.2	33.3	35.4
Sonomammogram	18.8	43.8	37.5
Follow-up BSE/CBE	58.3	10.4	31.3

* physicians could offer more than one answer

In terms of the reasons for recommending a particular test, the majority of the physicians (83.3%) indicated that the referral was due to age. When evaluating the case in terms of the patient's risk factors, 87.5% of the physicians recommended a test for this reason. When considering the signs or symptoms presented by the patient, only 10.4% of the physicians considered that the symptoms presented were relevant for a referral while 50% opted to not respond or to not assume a position (Table 14B).

TABLE 14B. REASON FOR REFERRAL (N=48)

Reason for Referral	Yes (%)	No (%)	No answer(%)
Age	83.3	4.2	12.5
Risk factor	87.5	6.3	6.3
Signs or symptoms	10.4	39.6	50.0

* physicians could offer more than one answer

None of the physicians who recommended a test due to signs or symptoms (10.4%) specified the reason for this referral. Of the physicians who recommended a referral due to the age of the patient (83.3%), only nine (22.5%) specified their reasons. Only nine of the forty-two physicians who recommended a test due to risk factors indicated the reasons for making this referral (Table 14C).

TABLE 14C. SPECIFIC REASON FOR REFERRAL

Reason for referral	Specific Reason		Percent (%)
Age	(N=9)	>40	66.6
		>35	11.1
		Age	22.2
Risk factor	(N=9)	Daughter diagnosed with breast cancer	44.4
		Positive BRCA	22.2
		Family	22.2
		Risk factor	11.1
Signs or symptoms	(N=5)	No response recorded	00.0

* physicians could offer more than one answer

External and personal barriers

In order to understand the physicians' perceptions about the barriers for patients who do not comply with the referral for screening mammograms, the questionnaire included specific questions about the reasons given by their patients for not having a mammogram. The reasons were divided into the physician's perceptions of personal reasons (social characteristics and attitudes, beliefs or women's values) and their perceptions of external or systemic reasons (characteristics of the health system, costs for the tests, and other aspects related to accessing and providing health services). Forty-two of the 48 physicians (87.5%) responded that the personal reasons influence the women motivation to non-compliance with the referral for a mammogram and 21 of the 48 physicians (43.7%) indicated that external reasons predominate in this decision.

The most frequently cited personal reason for non-compliance was that women considered the mammography procedure as painful. The cost of mammography or the lack of money to pay for a mammogram was the most often mentioned external reason by the patients to the physicians who responded to this question. Other personal reasons that were cited included attitudes such as lack of interest or forgetting an appointment. For external barriers, other reasons for non- compliance besides the cost of mammography were lack of transportation to the places where tests are done, and the long waiting period for a mammogram appointment (Tables 15 and 16).

TABLE 15. PERSONAL BARRIERS FOR MAMMOGRAM NON-COMPLIANCE (N = 42)

Personal Barriers	Percent (%)
Test is painful	16.0
Not interested	11.9
Forgot appointment	11.9
Did not go to mammogram appointment; lost appointment	9.5
No time available	9.5
Could not find the place where referred	7.1
Misplaced referral	7.1
Fear of having cancer	4.8
Did not go back for appointment	4.8
Family problems	2.4
Work	2.4
Do not have anything wrong	2.4
Could not go to appointment	2.4

* physicians could offer more than one answer

TABLE 16. EXTERNAL BARRIERS FOR MAMMOGRAM NON-COMPLIANCE (N=21)

External Barriers	Percent (%)
Lack of money	38.0
Lack of transportation	14.0
Appointment takes too long	9.5
Procedure not authorized	9.5
No place nearby	4.8
No equipment available	4.8
Appointment pending	4.8
Have not been given appointment	4.8
Difficulty with health system	4.8
Problems with insurance plan	4.8

* physicians could offer more than one answer

The physicians were also asked about the guidelines and criteria that they followed for recommending a screening mammogram for women 40 to 49 years of age, 50 to 64, and women older than 65. For this study, the first two age groups were of particular interest. For women 40 to 49 years of age, the 1997 NIH guidelines establish that a screening mammogram is recommended if

there are potential risk factors, signs or symptoms, taking into account a woman's medical history and her perception about her state of health. It is noteworthy that nearly one-third of the 35 physicians who participated in the questionnaire recommended a routine annual mammogram contrary to the guidelines and 23% of the physicians recommended mammography if there was some type of symptoms or sings.

TABLE 17. PHYSICIANS' RESPONSES ABOUT GUIDELINES FOR RECOMMENDING SCREENING MAMMOGRAMS FOR WOMEN 40 TO 49 YEARS OF AGE (N=35)

Physician's Response	Percent (%)
Routine annual	31.4
Annually if there is some type of signs or symptoms	22.9
Annually in cases with risk factors	14.3
Every 1 to 2 years for patients with risk factors	11.4
Screening	2.9
Every 1 to 2 years routinely	2.9
Every 2 years	2.9
Other	11.4

* physicians could offer more than one answer

Of the 35 physicians who answered the question about women age 40 to 49, 26 were specific about recommending a screening mammogram when there are risk factors presented by their patients. The risk factor most frequently specified was family history of breast cancer (34.6%) followed by the identification of any risk factor (30.7%) and then the age of the patient (11.5%). According to the NIH guidelines, the first factor mentioned is a risk factor but the age category of 40 to 49 years is not (Table 18). The specific symptom most frequently mentioned by physicians for recommending a screening mammogram for women 40 to 49 years of age was palpating a lump.

TABLE 18. PHYSICIANS' RESPONSES ABOUT GUIDELINES FOR RECOMMENDING SCREENING MAMMOGRAMS FOR WOMEN 40 TO 49 YEARS OLD BASED ON RISK (N=26)

Physician's Response	Percent (%)
Family history of breast cancer	34.6
Identification of any risk factor	30.7
Age	11.5
Other risk factors	7.7
Smoker	3.8
Identification or presence of BraCa1	3.8
First child after age 30	3.8
Personal history of breast cancer	3.8

* physicians could offer more than one answer

For women 50 to 64 years of age, the NIH Guidelines do recommend an annual screening mammogram and the vast majority of the physicians who answered the questionnaire (78%) responded accordingly to this frequency. A mammogram every two years was recommended by 14.8% of the physicians and 7% responded with another frequency but did not specify which. Only 56% of the 48 participating physicians gave specific reasons for mammogram referral. Fourteen of these 27 physicians indicated specific risk factors when backing up their answer. These factors were age (36%) and family history of breast cancer (21.4%). One of the 14 physicians who cited a specific reason answered other factors and specified chest radiation and estrogen therapy. Twelve of the 27 doctors specified a sign or symptom for a screening mammography in women age 50 to 64. Seventy-five percent of them did not mention a specific symptom. Of those who did specify a symptom, 16.7% brought up the palpation of a mass as important while 8.3% mentioned pain as significant.

For women 65 years of age and older NIH Guidelines recommend that the mammography be performed if the physician deems it as necessary. However, 91.3% of the participating physicians recommended an annual mammogram while 4.4% recommended one every two years.

The physicians were also asked to specify the main source of information on breast cancer for their female patients. Almost two-thirds indicated that they were the main source of information. On the other hand, only one-third stated that they answer questions from their patients while two-thirds indicated the opposite. It is interesting to observe that 62.2% of the clinicians indicate that they orient their patient and at the same time two-thirds indicate that they do not answer their patients' questions. This could be interpreted in terms of the physicians' perception of their relationship with their clients; one in which the doctor offers the information he deems necessary but does not promote communication with the patient or provides the atmosphere for the patient to feel comfortable and ask questions

A large majority of the physicians indicated that the patients do not receive orientation from nurses or health educators. Both are health professionals that were present at the health centers that were used to recruit physicians and the female respondents. These results could be interpreted in three ways:

- The physicians believe that they can provide adequate information
- The physicians do not find it necessary to refer patients to nurses or health educators for information
- The physicians are not aware of the skills and preparation in terms of orienting patients, of these two health professionals, specifically health educators.

More physicians indicated that a health educator provided information on breast cancer than those who indicated it was a nurse. Physicians also believe that written material is not being used by

their female patients as a source of information on breast cancer. The following Table summarizes this finding.

Table 19: Physician's Responses About Who Provides Information to Patients about Breast Cancer

Type of Information	Physician's Response	
	Yes (%)	No (%)
Medical Orientation	62.2	37.8
Orientation from Health Educator	33.3	86.7
Educational Materials	23.3	76.7
Orientation from Nurse	4.4	95.6
Answer patients' questions	8.3	91.7

* physicians could offer more than one answer

II. Review of Medical Records

Purpose

The main purpose for the review of medical records was to identify the sample of middle-aged, low socioeconomic level eligible women to be interviewed for the study.

Instrument

The instrument used to collect information from medical records was designed using the template from the Breast Cancer Screening Program in the Municipality of San Juan[5]. The instrument was evaluated and modified to meet the objectives of this research project. Two visits were carried out, one each in the metropolitan and non-metropolitan area health centers to determine if the proposed instrument was adequate. During the record reviews, the instrument was modified to

[5] The document was provided by the director of the metropolitan area health center utilized for this study.

facilitate the compilation of information necessary to determine a participant's eligibility and to include data to contact the eligible participant. (Appendix5). The instrument focused on the following areas: demographic data, eligibility criteria, and personal information required to contact the female participant.

Procedures

The review of medical records to select the sample of middle-aged, low socioeconomic level women to be interviewed for the study was carried out in the two health centers where focus groups had been held during the first phase of the project. The centers were identified as metropolitan community health center in San Juan and the non-metropolitan community health center, located on the northeast coast of Puerto Rico. Authorization was obtained from the medical director or the executive director of each center to carry out the medical record review. The medical records office in each center was initially visited to assure that the methodology for reviewing records in the two centers was as similar as possible. During this visit we familiarized ourselves with the organization of the records in order to train the individual who would be responsible for the record review. The personnel from both centers cooperated with the project's team such that the review process was rapid and homogenous.

A person with experience in medical record reviews in a cancer center was recruited to carry out the medical record review in both health centers selected for this study. This person was informed about the project's objectives and the sample selection criteria. The criteria for eligibility for a patient to be considered as a potential participant in the sample were the following:

- Age: A woman must be between the age of 40 and 64 as of January 1, 1998.

- Screening Mammogram Referral: A woman must have received a referral for a screening mammogram since January 1, 1998.

The records were selected from the medical records office register in each health center, where all patient records are stored. The register included the patient's name, age and date on which the medical record was opened. The record reviewer initially registered the medical record number of all female patients who met the age criteria. Once a list was completed with all patients who were age-eligible, the medical record was reviewed to corroborate the age and to determine if the patient met the second eligibility criteria: having received a referral for a screening mammogram since January 1, 1998. Information was compiled on the eligibility of the patients receiving services at each health center using an instrument designed during the first phase of the project. (Appendix5). If the patient met the second eligibility criteria, information was compiled in order to contact the patient. A total of 260 medical records were reviewed; 230 female patients were selected as eligible for the sample of women 40 to 64 years old to be interviewed. Of the 230 cases, 52.2% (120/230) were in the non-metropolitan area and 48.8% (110/230) were in the metropolitan area.

Quality Control

Site: **Community Health Center - Metropolitan Area**

1. The quality control review of medical records began in the morning. The list of records to be reviewed had been sent previously by fax and personnel from the medical records office had the records ready to begin the quality control process.
2. A total of 21 records were reviewed. Twenty of these records were randomly selected and an additional record was reviewed to verify a question that had arisen during data entry.

3. Of the 21 records reviewed, seven (7) corresponded to cases that had been classified during the initial review for participants eligible for interviews. This meant that there was a completed information form and the information could be verified during the second review. The other 14 records were reviewed to verify the non-eligibility that had been determined during the initial record review. For these cases, there were no forms with which to compare information.

4. The changes after the quality control process were minimal and did not affect the status of eligibility determined in the initial review for any of the cases.

5. The following observations made from the quality control review. Every form required some type of minor correction:

    - The postal zip code was not written on five of the seven reviewed forms.
    - The second address that appeared in the medical record was not written on three of the seven forms.
    - The residential address was not complete on four of the seven forms. (For the majority of the cases, the missing information was minimal. For example, P-2, which means second floor, was missing).
    - In two of the seven records, specifically on the progress forms, other symptoms appeared in the record.
    - In two a second referral for a mammogram was found in one record.
    - Important information from mammogram results was added to two forms.

Site: **Community Health Center - Non-Metropolitan Area**

1. The quality control record review began in the afternoon. Personnel of the medical records office who collaborated with the research team to carry out the review located the records.

2. A total of 20 records were randomly selected.

3. Of the 20 records reviewed, five cases had been classified as eligible for interviews during the initial review. For these records, there were completed information forms and the information could be verified during the second review. There was an additional case for which there was a completed form, but this case had been determined non-eligible in the office. The other 14 records were reviewed to confirm the non-eligibility that had been determined by the person in charge of the initial review. There were no forms for purposes of comparison for these cases.

4. The changes after the quality control process were minimal and did not affect the eligibility status previously determined. Of the six forms, five were eligible and one was ineligible.

5. The results of the quality control process were as follows:

   - The residential address was incomplete on two forms; the missing information was minimal.
   - On one form, the name of the person at the second address was missing.
   - Another mammogram referral was found in one record and this became the last referral recorded.

III. Interviews with Women Participants

Purpose

The main purpose of the interviews was to obtain quantitative data about factors that affect compliance with screening mammogram in order to determine the importance for low-income, middle-aged Puerto Rican women's self-assessment of breast cancer risks.

Sample Selection

The sample of low-income, middle-aged women was selected from the record review carried out at the two health centers where focus groups were held during the first phase of the project for women age 40 through 64. Two hundred-thirty (230) women were selected as eligible for the sample. Of these cases,52.2%(120/320) corresponded to the non-metropolitan area and 47.8% (110/230) corresponded to the metropolitan area.

Instrument

The instrument used to interview female participants was the product of discussion and analysis with the focus groups during the first phase of the project. The questionnaire was tested on ten women with backgrounds similar to the future participants to verify appropriateness in social and cultural terms, particularly vocabulary and issues related to women with low socioeconomic conditions in Puerto Rico. This also served to verify the appropriateness of the order of the questions. (Appendix 2.)

Training for Interviewers

The training session was held during the month of September. The training included a discussion of the interviewer's manual and the process for administering the questionnaire. The training also included information on the following aspects:

- Overview of breast cancer
- Risk factors
- NIH guidelines
- Difference between screening and diagnostic mammogram

The training ended with a brief workshop on the administration of the interview and the administrative forms that were to be completed. Each interviewer participated in "mock interviews" with the researchers and project personnel in order to become familiar with the questionnaire. Changes were incorporated into the questionnaire as a result of these experiences.

Procedures

Four interviewers were fully trained to carry out the interviews in the residences of the women eligible for the study. As part of the interview materials, the interviewers received a Participant Control Card (PCC) (Appendix 6). The PCC contained personal data about the participant, the corresponding control number, general information about the health center chosen by the participant and the last date of a referral obtained from the health center. The interviewers noted all contacts with each participant on the PCC, the temporary or final status of the interview, and the date on which the interview was completed. When the interview was carried out, the interviewer explained the general objectives of the project to the participant and the contents of the interview. If the woman agreed to participate, she was given an informed consent form to read and sign. (Appendix 7.) Once this process was completed, the interviewer gave the participant a copy of the informed consent. Upon completion of the interview, the interviewer gave the participant a complimentary gift for her participation and educational materials about breast cancer and the different methods of prevention and early detection.

The phase of interviews of low-income, middle-aged women began during the month of October and will be completed during the next year of the study. Eighty percent (80%) of the sample has been interviewed thus far and the level of participation has been very satisfactory, with the exception of a few participants who have moved. Having to identify the participant is a factor that

has added time to the work of the interviewers. At the time of this report, only one participant has refused to participate in the study. The tasks of data entry and editing have begun and will be finalized during the next year of the study. The quality control criteria have also been established.

KEY RESEARCH ACCOMPLISHMENTS

- Establishment of working links with Cancer Center of the University of Puerto Rico (collaboration in proposal-writing between Dr. Nayda Figueroa, Director of the Cancer Center, and Dr. Melba Sánchez-Ayéndez, PI of this research project during academic year 2001-2002) (Appendix 8)
- Establishment of working links with Rio Grande Community Health Center (future breast cancer health education program based on results of Project Mammogram Compliance Among Low-Income Middle-Aged Women in Puerto Rico DAMD-99-1-9359. (Appendix 9)

REPORTABLE OUTCOMES

- Survey instrument "Factors affecting mammography compliance among middle-aged women in Puerto Rico" (Appendix 2)
- Instrument on patterns of patient referrals for screening mammogram (Appendix 3)
- Instrument for evaluation of participant eligibility (Appendix 5)
- Poster sessions at international and national professional meetings

  - M. SÁNCHEZ AYÉNDEZ, A.L. DÁVILA, M. BUSTILLO, C.M. NAZARIO, M.C. LARRIUZ, G. MARTINEZ. Mammography Compliance among Middle-Aged Women in Puerto Rico, Presented at "Annual Forum of Research and Education - 2001", Medical Sciences Campus, April 18-20, 2001. (Appendix 10)

  - C.M. NAZARIO, N. FIGUEROA, M. SÁNCHEZ AYÉNDEZ, A.L. DÁVILA, M. BUSTILLO M.C. LARRIUZ, G. MARTINEZ. Breast Cancer and Screening Knowledge among Physicians in Puerto Rico, Presented at "Annual Forum of Research and Education - 2001", Medical Sciences Campus, April 18-20, 2001. (Appendix 11)

  - M. SÁNCHEZ AYÉNDEZ, A.L. DÁVILA, M. BUSTILLO, C.M. NAZARIO, M.C. LARRIUZ, G. MARTINEZ. Obstacles to Mammography Compliance among Middle-Aged Women in Puerto Rico, Presented at the XVII World Congress of the International Association Of Gerontology, Vancouver July 1-6 2001. (Appendix 12)

- M. SÁNCHEZ AYÉNDEZ, A.L. DÁVILA, M. BUSTILLO, C.M. NAZARIO, M.C. LARRIUZ, G. MARTINEZ.. Obstacles for mammogram compliance for low-income, middle-aged women in Puerto Rico, Presented at "XVII World Conference of Health Promotion and Education (Paris, France, July 15-20, 2001. (Appendix 13)

Conclusions

The physicians' study was the core of this phase of the research. The Conclusions of this annual report pertain to this phase of the research only. The inquiry centered upon the following issues:

1. physicians' information on knowledge of breast cancer and 1997 NIH screening guidelines for women age 40-49 and 50-64
2. physicians' attitudes toward patient-physician relationship.
3. physicians' perception of patient's barriers to comply with a mammogram referral.

First, the investigators posed the following question: *Are physicians adhering to the 1997 NIH screening mammogram guidelines for women age 40 to 49 and 50 to 64?* The investigators proposed the following hypothesis: *Physicians will correctly follow the NIH screening mammogram guidelines for less than 90% of their female patients in each age category.* When comparing the physicians' responses with the NIH guidelines about the criteria for recommending a screening mammogram for women age 40 to 49 years old, 49.9% of the physicians coincided with the guidelines in recommending an annual exam if there are potential risk factors. However, in nine (9) of the twelve (12) case studies (1-3,5-7,9,11 and 12), there were physicians who indicated that the age for recommending a screening mammogram was 35 years or older, which indicates a lack of knowledge or indifference to the 1997 NIH guidelines. For women age 50 to 64, 78% of the physicians recommended an annual mammogram according to the established guidelines. Our hypothesis was correct for both age categories, less than 90% of the physicians followed the NIH guidelines. In the case of women age 40 to 49, where the guidelines are not as specific as for those

50 to 64 and physician-patient communication is highly recommended, the results for physicians following NIH guidelines were much less than anticipated.

In terms of the physicians' attitudes toward the physician-patient relationship, our data tends to show that the physicians consider themselves as the patient's primary source of information and do not refer patients to other health professionals such as health educators or nurses . Specifically, 62% of the physicians in our study stated that they inform their patients about breast screening recomendations. Only 18% of the physicians refer their patients to other health profesionals (i.e., nurse,health educator) for further guidance or advice regarding preventive health activities or breast cancer information. Contrary to what could be expected from physicians who consider themselves as the patients primary source of information, 67% of them admitted that they do not answer the patients' questions. They do not answer their patients questions yet neither do they refer them to other health professionals for advice. Similarly, they do not believe that their low-income middle-aged female patients are getting information on breast cancer from written materials. Perhaps this view reflects a perception that written material about breast cancer is inadequate and is not frequently read by low-income patients. Maybe these two findings are a reflection of an attitude permeated by a perception of low-income women's inability to understand either a physician's explanation or written information. However, results do not permit us to reach this conclusion as the way in which questions were worded does not allow for this type of analysis. Finally, more physicians (42 of 48) cited personal reasons as barriers for mammogram compliance than external ones (21 of 48).

More physicians tend to believe that personal reasons are influencing in the non-compliance screening among low-income middle-aged women than those who cite external reasons. Pain or

discomfort is the most cite personal reason while lack of money or cost is the external reason most often stat by the physicians.

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APPENDIX 1

From: Miles Cheryl R <Cheryl.Miles@DET.AMEDD.ARMY.MIL>
To: 'MELBA SANCHEZ-AYENDEZ & ALBERTO GARCIA-MOLL' <m_sanchez@worldnet.att.net>
Date: Thursday, July 01, 1999 1:36 PM
Subject: RE: DAMD17-99-9359

Courtesy Copy

Enclosed is the recommended budget for this award. The technical staff concurs with the Peer Review Panels recommendation to limit this project to 3 years. Based on your previous response, it is understood that Tasks 5 & 6 will be deleted.

The COLA was adjusted to reflect 3% as recommended by the Contacting Officer.

Please let me know if you are willing and able to accomplish Tasks 1 - 4 in 3 years and within the recommended budget. If the budget is acceptable and the statements underneath it are accurate, please return a signed copy of the document as soon as possible.

The projected start date for this award is 1 August 1999.

-----Original Message-----
From: MELBA SANCHEZ-AYENDEZ & ALBERTO GARCIA-MOLL
[mailto:m_sanchez@worldnet.att.net]
Sent: Thursday, June 24, 1999 8:52 PM
To: usamrmc: cheryl miles
Cc: Myriam Rivera-Cano; ana luisa davila
Subject: DAMD17-99-9359: proposed budget revision

TO: Ms Cheryl Miles
RE: DAMD17-99-9359:
"Mammography Compliance among Low-Income Middle Aged Women in Puerto Rico"

Our research team met yesterday and today to work on a new statement of work (SOW) and revised budget for a 4 year period that includes Tasks 5 & 6 of original proposal as well as on budget justification.

I include the proposed budget for 4 years instead of the original 5 or the 3 year period that did not include tasks 5 & 6 because it is not feasible within that time limit. We had to comprise activities of two years in one year as is the case for year 2 (tasks 2 & 3 in one year) and year 4 (prior years 4 & 5; tasks 5 & 6) and certain costs had to be incorporated from the year that was left out if we wanted to carry out certain activities needed for either data analysis or intervention strategies. Please let us know what is agreeable to USAMRMC in order to submit new SOW according to budget: 3 years without tasks 5 & 6 or 4 years with tasks 5 & 6. Our project was supposed to begin on July 1, 1999 and now we must consider August 1, 1999 or a later date. We prefer August.

APPENDIX 2

UNIVERSITY OF PUERTO RICO
MEDICAL SCIENCES CAMPUS
GRADUATE SCHOOL OF PUBLIC HEALTH
INTERDISCIPLINARY RESEARCH ON WOMEN'S HEALTH

MAMMOGRAM COMPLIANCE AMONG MIDDLE-AGED WOMEN IN PUERTO RICO

QUESTIONNAIRE

CONTROL NUMBER ☐-☐☐☐-☐

A. SOCIODEMOGRAPHIC INFORMATION

THE FOLLOWING QUESTIONS REFER TO DEMOGRAPHIC INFORMATION.

1. What is your birthdate? DATE: |__ __| |__ __| |__ __ __ __| → ***GO TO QUESTION #3***
   (DAY) (MO.) (YEAR)

> INTERVIEWER: IF THE INTERVIEWEE DOES NOT KNOW HER BIRTHDATE GO TO QUESTION #2

2. How old are you? |__ __|

3. What is the last grade in school that you completed? (What grade did you finish in school?) |__ __|

   (00) I did not attend school
   (01-12) Grade completed, H.S. diploma, equivalency exam

> INTERVIEWER: CODIFY RESPONSE 01 = FIRST GRADE TO 12 = 12 TH GRADE/DIPLOMA/EQUIVALENCY EXAM

   (13) Technical or Vocational Studies
   (14) Associate Degree
   (15) Bachelor's Degree
   (16) Graduate Studes
   (17) Other studies _____
   SPECIFY

4. What is your marital status? |__|

   (0) Never married
   (1) Widow
   (2) Married
   (3) Living with partner
   (4) Separated
   (5) Divorced

5. How many children do you have? |__ __|

> INTERVIEWER: IF INTERVIEWEE HAS NEVER HAD ANY CHILDREN, CODIFY (00) AND GO TO QUESTION #10

6. What is the birthdate of your first child? |__ __|(DAY) |__ __|(MO.) |__ __ __ __|(YEAR) → *GO TO QUESTION #8*

> INTERVIEWER: IF THE INTERVIEWEE HAS HAD ONLY ONE CHLD (SEE RESPONSE TO #5) GO TO QUESTION #10. IF SHE HAS HAD MORE THAN ONE CHILD, GO TO QUESTION#8
>
> IF THE INTERVIEWEE DOES NOT KNOW THE BIRTHDATE, GO TO THE NEXT QUESTION.

7. What is the age of your first child? |__ __|

8. What is the birthdate of your last child? |__ __|(DAY) |__ __|(MO.) |__ __ __ __|(YEAR) → *GO TO QUESTION #10*

> INTERVIEWER: IF THE INTERVIEWEE DOES NOT KNOW THE BIRTHDATE GO TO THE NEXT QUESTION.

9. What is the age of your last child? |__ __|

10. Do you currently work outside of your home ? |__|

(1) Yes
(0) No ..... *GO TO QUESTION #12*

11. What is your occupation?

Occupation _____ *GO TO QUESTION #14*

12. Have you worked outside of your home in the past? |__|

(1) Yes
(0) No ..... *GO TO QUESTION #14*

13. What was your occupation?

Occupation : _____

14. What medical insurance do you have?

> **INTERVIEWER: IF THE INTERVIEWEE DOES NOT KNOW OR DOES NOT REMEMBER, ASK HER TO SHOW YOU HER INSURANCE CARD. WRITE ONE (1) IN THE SPACE CORRESPONDING TO THE INSURANCE COVERAGE THAT WAS MENTIONED. WRITE ZERO (0) FOR INSURANCE COVERAGE NOT MENTIONED OR THAT INTERVIEWEE INDICATES SHE DOES NOT HAVE.**

(a) Insurance card from the Government of Puerto Rico ..... |___|

(b) Medicaid ..... |___|

(c) Blue Net ..... |___|

(d) CESCA ..... |___|

(e) Medicare Part A ..... |___|

(f) Medicare Part B ..... |___|

(g) I don't remember ..... |___|

(h) I don't know ..... |___|

(i) Other ..... _____ |___|

SPECIFY

B. FAMILY AND PERSONAL HISTORY

THE FOLLOWING QUESTIONS REFER TO THE INTERVIEWEE'S HEALTH HISTORY DURING THE PAST TWELVE MONTHS. (FROM ___(MONTH, 1999)___ THROUGH ___(MONTH, 2000)___).

15. Have you felt continuous or constant (almost all of the time) **pain or discomfort** in your breasts for more than 2 weeks in the last twelve months? |___|

    (1) Yes
    (0) No
    (8) I don't remember
    (9) I don't know

16. Have you felt a **lump** (nodule, hardening, bump or mass) in your breasts in the past twleve months? |___|

    (1) Yes
    (0) No
    (8) I don't remember
    (9) I don't know

17. Have you had **secretions from your nipples** (liquids that aren't milk) in the last twelve months? Remember, this is from month, 1999 through month, 2000. |___|

(1) Yes
(0) No ..... *GO TO QUESTION #19*
(8) I don't remember ..... *GO TO QUESTION #19*
(9) I don't know ..... *GO TO QUESTION #19*

18. What color were these secretions? _____
SPECIFY

19. Have you ever had a **biopsy** of your breast (test with a needle/they cut a little piece of your breast)? |___|

(1) Yes
(0) No ..... *GO TO QUESTION #23*
(8) I don't remember ..... *GO TO QUESTION #23*
(9) I don't know ..... *GO TO QUESTION #23*

20. When was your last **biopsy**? DATE OF LAST BIOPSY: |__ __| |__ __ __ __|
(MO) (YEAR)

21. What was the result of the **biopsy**? |___|

(1) Positive
(2) Negative
(8) I don't remember
(9) I don't know

22. What did your doctor say or recommend about the results of the **biopsy**? |___|
(1) Information provided by the doctor:_____
_____
_____

(8) I don't remember
(9) I don't know

23. Has any of your family members ever had breast cancer? |___|

(1) Yes
(0) No ..... *GO TO QUESTION #25, PG. 5*
(8) I don't remember ..... *GO TO QUESTION #25, PG. 5*
(9) I don't know ..... *GO TO QUESTION #25, PG. 5*

24. Which family member?

> INTERVIEWER: FOR EACH FAMILY MEMBER MENTIONED BY THE INTERVIEWEE ASK IF THE PERSON IS ON THE MOTHER'S OR FATHER'S SIDE OF THE FAMILY. MARK ONE (1) IN THE SPACE CORRESPONDING TO THE FAMILY MEMBER MENTIONED BY THE INTERVIEWEE AND ZERO (0) IN THE SPACE FOR MEMBERS NOT MENTIONED.

	MATERNAL SIDE ONLY	PATERNAL SIDE ONLY	FAMILY MEMBER
a. Mother	N/A	N/A	|__|
b. Daughter	N/A	N/A	|__|
c. Niece	N/A	N/A	|__|
d. Granddaughter	N/A	N/A	|__|
e. Sister	|__|	|__|	|__| (BY FATHER AND MOTHER)
f. Aunt	|__|	|__|	N/A
g. Grandmother	|__|	|__|	N/A
h. Cousin	|__|	|__|	|__|
i. Other family member_____ *SPECIFY*	|__|	|__|	|__|

> REMEMBER TO ASK, WHEN APPLICABLE, IF THE FAMILY MEMBER IS BIOLOGICAL (RELATED BY BLOOD)

25. Do you have any friends, neighbors or colleagues from work who have been diagnosed with breast cancer or who have died from breast cancer? |__\|

(1) Yes → a. What is or was this person's relationship to you?_____
SPECIFY
(WRITE ALL THAT ARE MENTIONED)

(0) No
(8) I don't remember
(9) I don't know

26. Has a doctor ever told you that you have cancer, any type of cancer? |__\|

(1) Yes
(0) No ..... *GO TO SECTION C, PG. 6*
(8) I don't remember ..... *GO TO SECTION C, PG. 6*
(9) I don't know ..... *GO TO SECTION C, PG. 6*

27. With what type of cancer were you diagnosed? |__|

(1) Breast cancer
(0) Other type of cancer: _____ ..... ***GO TO SECTION C***
SPECIFY
(8) I don't remember ..... ***GO TO SECTION C***
(9) I don't know ..... ***GO TO SECTION C***

28. When were you diagnosed with breast cancer? DATE : |__ __| |__ __ __ __| → ***GO TO SECTION C***
(MO.) (YEAR)

> INTERVIEWER: IF THE INTERVIEWEE DOES NOT REMEMBER THE DATE OF THE DIAGNOSIS, GO TO QUESTION #29

29. How old were you when you were diagnosed with breast cancer? → AGE: |__ __|

C. EARLY DETECTION PRACTICES

THE FOLLOWING QUESTIONS REFER TO PRACTICES RELATING TO YOUR HEALTH.

30. Can you tell me what are the different ways that you know that are used to detect or discover breast cancer in its early stages?

> INTERVIEWER: WRITE ONE (1) FOR THE METHODS THAT ARE MENTIONED BY THE INTERVIEWEE. WRITE ZERO (0) FOR THE METHODS THAT ARE NOT MENTIONED.

(a) Mammogram (A breast x-ray) |__|

(b) Clinical exam (Breast exam by a doctor or a nurse) |__|

(c) Self-exam (Examining or touching your breasts) |__|

(d) Other _____ |__|
SPECIFY

(e) I don't remember |__|

(f) I don't know |__|

31. Has a doctor or a health professional ever explained to you about a mammogram (a breast x-ray)? |__|

(1) Yes
(0) No
(8) I don't remember
(9) I don't know

As I mentioned to you at the beginning of the interview, we identified possible participants for this study from different health centers. From each center, we obtained a list of the women who have received at least one referral (order/prescription) for a mammogram (a breast x-ray) during the past two years and the dates of these referrals. Your name is on this list and the date for your last referral was:

|__ __| |__ __| |__ __ __ __| [See Participant's Control Card]
(Day) (Mo.) (Year)

> Interviewer:
> → If Question #27 page 6 was answered [1] Breast cancer, Go to Question #33 and refer to the date of the referral that appears on the Participant's Control Card.
>
> → If the answer to Question #27 page 6 was not [1] Breast cancer, continue with Question # 32 .

32. After this date, [Repeat the date of the last referral] has any doctor given you another referral (order/prescription) for a mammogram (breast x-ray)? |__|

(1) Yes
(0) No ..... ***Go to Question #33***
(8) I don't remember ..... ***Go to Question #33***
(9) I don't know ..... ***Go to Question #33***

a. When did the doctor give you this referral? →Date: |__ __| |__ __| |__ __ __ __|
(Day) (Mo.) (Year)

> Interviewer: If the Interviewee Answered Question #32-A, write the date on the Participant's Control Card.

33. What type of doctor gave you your last referral (order/prescription) for a **mammogram** (breast x-ray)? Was the doctor a. . . . .

> Read all of the alternatives

(1) Gynecologist/Obstetrician (a doctor who treats women's diseases)? |__|
..... ***Go to Question #34, Pg. 8***
(2) General practitioner? ..... ***Go to Question #34, Pg. 8***
(3) Family doctor? ..... ***Go to Question #34, Pg. 8***
(4) Internist? ..... ***Go to Question #34, Pg. 8***
(5) Another type of specialist?

_____
Specify ..... ***Go to Question #34, Pg. 8***

(8) I don't remember
(9) I don't know

> Interviewer: If the Interviewee does not know the speciality of the doctor, ask Question #33 a and b

a. What is the name of the doctor who gave you the last referral (order/prescription) for a mammogram? **NAME:** _____

b. What is the name of the health center where you saw the doctor who gave you the referral?
CENTER: _____

34. During the last visit when you received the referral (order/prescription) for a mammogram (breast x-ray) did this doctor. . . .

READ ALL OF THE ALTERNATIVES. MARK (1)=YES; (0)=NO; (8) =I DON'T REMEMBER; (9)= I DON'T KNOW

a) . . . talk to you about breast cancer? |___|

b) . . . explain to you about the ways (procedures or methods) to detect (discover) breast cancer in its early stages? |___|

c) . . . show you how to examine your own breasts (self-exam or touch your own breasts)? |___|

d) . . . do an **exam** of your breasts (when the doctor touches your breasts)? |___|

e) . . . explain the reasons to give you a referral for a mammogram (breast x-ray)? |___|

f) . . . tell you how often you should have a mammogram (breast x-ray)? |___|

35. Thinking about the **last** referral (order/prescription) for a mammogram (breast x-ray) that your doctor gave you, the referral on (**INTERVIEWER: REPEAT THE DATE OF THE LAST REFERRAL REGISTERED ON THE PARTICIPANT'S CONTROL CARD**), why did the doctor give you this referral (order/prescription)? **[READ ALL OF THE ALTERNATIVES]** |___|

(1) .Did you ask for the referral (order/prescription) as a routine check-up?

(2) Did you ask for the referral (order/prescription) because you felt some type of symptom or discomfort?

(3) Did the doctor recommend it as a routine check-up?

(4) Did the doctor recommend it because you had some kind of symptom or discomfort?

(5) Other reason _____
SPECIFY

(8) I don't remember

(9) I don't know

36. Once you received the referral (order/prescription), did you have the mamogram (breast x-ray)? |___|

(1) Yes
(0) No ..... **GO TO QUESTION #38**
(8) I don't remember
(9) I don't know

37. When did you have this mammogram (breast x-ray)?

→ **DATE OF MAMMOGRAM:** |__ __| |__ __ __ __|
(MO.) (YEAR)

GO TO QUESTION #46, PG. 12

38. What was the **main reason** for **NOT** having the mammogram (breast x-ray) when the doctor gave you the referral (order/prescription)? |___||___|

(01) I didn't know that I had to have it
(02) I didn't think that it was necessary
(03) I didn't think that it was important
(04) I didn't have any symptoms
(05) I didn't have the money at the time
(06) My health insurance doesn't cover it
(07) It's painful
(08) It's uncomfortable
(09) I didn't have anyone to take care of my children
(10) I had transportation problems
(11) Careless/ Forgetful/ Lazy/ Neglectful
(12) My husband didn't let me go
(13) The clinic's schedule wasn't convenient for me
(14) Afraid of cancer, surgery or dying
(15) I am waiting for an appointment
(16) I didn't know where to go
(17) I didn't have the time
(18) Other reason: _____
SPECIFY

39. Are there any **other reasons** besides this for **NOT** having the mammogram (breast x-ray) when the doctor gave you the referral (order/prescription)? |___|

(1) Yes
(0) No ..... **GO TO QUESTION #41, PG. 10**

40. What are the other reasons for **NOT** having the **mammogram** (breast x-ray) when the doctor gave you the referral (order/prescription)? Was it because. . .

> **INTERVIEWER: READ ALL OF THE ALTERNATIVES. WRITE ONE (1) FOR ANY REASON MENTIONED BY THE INTERVIEWEE; ZERO (0) FOR ANY REASON NOT MENTIONED; (7) IF IT DOES NOT APPLY. DO NOT READ THE ALTERNATIVE MENTIONED IN QUESTION #38.**

(a) you didn't know that you had to have it? |___|

(b) you didn't think that it was necessary? |___|

(c) you didn't think that it was important? |___|

(d) you didn't have any symptoms? |___|

(e) you didn't have the money at the time? |___|

(f) your health insuance doesn't cover it? |___|

(g) it's painful? |___|

(h) it's uncomfortable? |___|

(i) you didn't have anyone to take care of your children/grandchildren or other person who you care for? |___|

(j) you had problems with transportation? |___|

(k) careless/ forgetful/ lazy/ neglectful? |___|

(l) your husband didn't let you go? |___|

(m) the clinic's schedule wasn't convenient for you? |___|

(n) you were afraid of cancer, surgery, or dying? |___|

(o) you are waiting for the appointment? |___|

(p) you didn't know where to go? |___|

(q) you didn't have the time? |___|

(r) Another reason? _____ |___|
SPECIFY

41. Have you ever had a mammogram (breast x-ray)? |___|

(1) Yes
(0) No ..... *GO TO QUESTION #43*
(8) I don't remember ..... *GO TO QUESTION #46, PG. 12*
(9) I don't know ..... *GO TO QUESTION #46, PG. 12*

42. How long has it been since you had you **last mammogram** (breast x-ray)? |___|

(1) One year ago or less
(2) Two years ago
(3) Three years ago
(4) Four years ago
(5) Five years ago or more
(8) I don't remember
(9) I don't know

GO TO QUESTION #46, PG. 12

43. What is your **main reason** for **NEVER** having had a **mammogram** (breast x-ray)? |___||___|

(01) I didn't know that I had to have one
(02) I don't think that it's necessary
(03) I don't think that it's important
(04) I don't have any symptoms
(05) I don't have the money
(06) It's painful
(07) My health insurance doesn't cover it
(08) It's uncomfortable
(09) I don't have anyone to take care of my children
(10) I have problems with transportation
(11) Careless/ Forgetful/ Lazy/ Neglectful
(12) My husband won't let me go
(13) The clinic's schedule isn't convenient for me
(14) Afraid of cancer, surgery or dying
(15) I'm waiting for an appointment
(16) I don't know where to go
(17) I don't have the time
(18) Other reason:_____
SPECIFY

44. Are there any **other reasons** for **NEVER** having had a **mammogram** (breast x-ray)? |___|

(1) Yes
(0) No ..... ***GO TO QUESTION #46, PG. 12***

45. What are the **other reasons** for **NEVER** having had a **mammogram** (breast x-ray) Was it because. . . .

> **INTERVIEWER: READ ALL OF THE ALTERNATIVES. WRITE ONE (1) FOR ANY REASON MENTIONED BY THE INTERVIEWEE; ZERO (0) FOR ANY REASON NOT MENTIONED; (7) IF IT DOES NOT APPLY. DO NOT READ THE ALTERNATIVE MENTIONED IN QUESTION #43.**

(a) you didn't know that you had to have it? |___|

(b) you don't think that it's necessary? |___|

(c) you don't think that it's important? |___|

(d) you don't have any symptoms? |___|

(e) you don't have the money at this time? |___|

(f) your health insuance doesn't cover it? |___|

(g) it's painful? |___|

(h) it's uncomfortable? |___|

(i) you don't have anyone to take care of your children/grandchildren or other person who you care for? |___|

(j) you have problems with transportation? |___|

(k) careless/ forgetful/ lazy/ neglectful? |___|

(l) your husband won't let you go? |___|

(m) the clinic's schedule isn't convenient for you? |___|

(n) you're afraid of cancer, surgery, or dying? |___|

(o) you're waiting for the appointment? |___|

(p) you don't know where to go? |___|

(q) you don't have the time? |___|

(r) Other reason? _____ |___|
SPECIFY

46. Do you examine your own breasts (touch your breasts to look for or find masses, bumps, lumps or changes in the skin, a self-exam)? |___|

(1) Yes
(0) No . . . . . ***GO TO QUESTION #48, PG. 13***

47. How often did you examine your breasts during the last_____(month before)?

a. Number of times ..... |__ __|

b. This is the number of times ..... |__|
(1) each week
(2) each month
(8) I don't remember
(9) I don't know

INTERVIEWER: MENTION THE PREVIOUS MONTH.

48. Who taught you or how did you learn to examine your breasts (touch your breast or breast self-exam)?

INTERVIEWER: MARK ONE (1) FOR EVERY ALTERNATIVE MENTIONED BY THE INTERVIEWEE AND ZERO (0)FOR ANY ALTERNATIVE NOT MENTIONED.

(a) Doctor |__|

(b) Nurse |__|

(c) Other Health Professional |__|

(d) Educational talks |__|

(e) Informational materials from a health center/hospital/doctor's office |__|

(f) Television / radio |__|

(g) A family member/neighbor/friend |__|

(h) I don't remember |__|

(i) I have never received any information |__|

(j) I do not know how to examine my breasts |__|

(k) Other source _____ |__|
SPECIFY

D. Perception of Doctor-Patient Relationship

The following questions refer to the treatment that you receive from the majority of the doctors you have visited. For each question, answer if you have never felt this way, sometimes, almost always or always felt this way.

> Interviewer: Read all of the alternatives. For Questions **49-54**, circle the number of the alternative that corresponds to the Interviewee's answer. Emphasize that the questions refer to the majority of the doctors that the Interviewee has visited.

49. Do you feel that **the majority** of the doctors you have visitied:

	Never	Sometimes	Almost Always	Always
(a) listen to what you tell them about how you feel?	1	2	3	4
(b) answer the questions that you might have about your health or about any treatment or medicine that they prescribe?	1	2	3	4
(c) pay enough attention to you?	1	2	3	4

Do you feel that **the majority** of the doctors you have visitied:

(d) are concerned about your health?	1	2	3	4
(e) give you information about the results from the tests that they sent you to have?	1	2	3	4
(f) keep you up-to-date with information about your health?	1	2	3	4
(g) are attentive to you?	1	2	3	4

For the following questions, please tell me if you feel NOT AT ALL SATISFIED, SOMEWHAT SATISFIED, SATISFIED OR VERY SATISFIED. Remember, we are asking about the treatment that you receive from THE MAJORITY of the doctors you have visited.

Interviewer: Read all of the alternatives	Not At All Satisfied	Somewhat Satisfied	Satisfied	Very Satisfied
50. How satisfied are you with the way **the majority** of the doctors tell you things?	1	2	3	4
51. How satisfied are you with the way **the majority** of the doctors treat you?	1	2	3	4

E. Attitude about Health

Next we are presenting various statements relating to your health. Please tell us if you agree or disagree.

Interviewer: Read all Alternatives.	Agree	Disagree	I don't know
52. If your doctor prescribes you a medicine, you take it even though it affects your daily life	1	2	9
53. If you take care of yourself, you can prevent dying from breast cancer.	1	2	9
54. You visit the doctor even if you don't feel sick.	1	2	9

F. Knowledge about Breast Cancer

Your opinion is very important for us to learn about what women in Puerto Rico think about breast cancer. Next I am going to read you various statements about breast cancer and I would like to know your opinion. When I read a sentence, please tell me if you think that the statement is true or false.

Interviewer: Mark an (X) for the response in the corresponding column. If the Interviewee answers "I don't know", does not answer, or appears to not understand the sentence, read it again and repeat **"YOUR OPINION IS VERY IMPORTANT TO US"**. **DO NOT CHANGE THE WORDS IN THE SENTENCE.**

STATEMENTS	True	False	I Don't know
55. A possible symptom of breast cancer is liquid coming out of the nipple.			
56. A lump (hardening, nodule, bump, mass) in the breast is a symptom of breast cancer.			
57. Women who don't have children have less chance of having breast cancer.			
58. Women age 40 and over should have a mammogram (breast x-ray) every year.			
59. Hitting, brusing or injuring the breast can cause breast cancer.			
60. When a mother or sister has had breast cancer, a women has a greater possibility of developing this cancer.			
61. Breast cancer is always painful.			
62. Pain, burning or discomfort in the breast or nipple are possible symptoms of breast cancer.			
63. A mammogram (breast x-ray) detects (discovers) breast cancer in its early stages.			
64. Women under the age of 50 have more chance of developing breast cancer than women over this age.			
65. A mammogram (breast x-ray) is only necessary when a woman feels discomfort in her breasts.			
66. Women who smoke have a greater risk of developing breast cancer.			
67. Women who have children before age 30 have a greater risk of developing breast cancer.			
68. Women on low-fat diets have a greater possibility of developing breast cancer.			
69. Breast cancer always results in death.			
70. A mammogram (breast x-ray) is the most accurate or efficient test for detecting (discovering) breast cancer.			
71. Women who breast-feed their children have a greater possibility of developing breast cancer.			

G. Sources of Information

The following questions refer to the different ways that you receive information about breast cancer.

72. Where or from whom have you received information about breast cancer?

> **Interviewer: Mark one (1) for each alternative that the interviewee mentions and zero (0) for the alternatives not mentioned.**

(a) Doctor |___|

(b) Nurse |___|

(c) Health professionals |___|

(d) Radio |___|

(e) Television |___|

(f) Reading materials (newspapers, magazines, books) |___|

(g) Family members |___|

(h) Friends / Neighbors |___|

(i) Informative materials in health centers |___|

(j) Other sources _____ |___|
Specify

73. Where or from whom did you receive information about mammograms (breast x-rays)?

> **Interviewer: Mark one (1) for each alternative that the interviewee mentions and zero (0) for the alternatives not mentioned.**

(a) Doctor |___|

(b) Nurse |___|

(c) Health professionals |___|

(d) Radio |___|

(e) Television |___|

(f) Reading materials (newspapers, magazines, books) |___|

(g) Family members |___|

(h) Friends / Neighbors |___|

(i) Informative materials in health centers |___|

(j) Other sources _____ |___|
Specify

H. Access to Services

The following questions are related to medical appointments.

74. The majority of time, what transportation do you use to get to your medical appointments? |___|

    (1) Own car
    (2) Public transportation (bus or public van)
    (3) Family member's car
    (4) Neighbor or friend's car
    (5) I pay someone to take me
    (6) Municipality or government transportation
    (7) Private transportation
    (8) Walk
    (9) Other means of transportation_____
    Specify

75. The majority of the time, who goes with you to the doctor's office when you have an appointment? |___|

    (0) No one
    (1) My husband (spouse)
    (2) My daughter(s)
    (3) My son(s)
    (4) My daughter-in-law or son-in-law
    (5) My sister(s) or brother(s)
    (6) Another family member
    (7) My friend(s) /neighbor(s)
    (8) Another person_____
    Specify

76. If you take care of small children, grandchildren or another person, do you have any problems finding someone to take care of her/him/them when you have a doctor's appointment? |___|

    (1) Never
    (2) Sometimes
    (3) Almost always
    (4) Always
    (5) I don't take care of anyone ..... ***Go to Question #77, Pg. 19***

    a. Who do you take care of? |___|

    (1) Small children or grandchildren
    (2) Live-in partner
    (3) Mother
    (4) Father
    (5) Other family member _____
    Specify

I. State of Health

The following questions refer to your current state of health.

77. Have you visited a doctor (any type of doctor) in the **last twelve months**? |__|

(1) Yes
(0) No ..... *Go to Question #79, Pg. 19*
(8) I don't remember ..... *Go to Question #79, Pg. 19*
(9) I don't know ..... *Go to Question #79, Pg. 19*

78. How often have you visited the doctor (any type of doctor) in the **last twelve months** ,that is from *(Month, 1999)* *through* *(Month, 2000)*). |__||__|

a. Number of times ..... |__|

b. This number of times is [Read the alternatives] .....
(1) each week
(2) each month
(3) each year
(8) I don't remember
(9) I don't know

79. Have you been diagnosed with any of the following conditions?

Interviewer: Read all of the alternatives. Circle the number that corresponds to the interviewee's answer.	Yes	No	I don't remember	I don't know
(a) Diabetes	1	0	8	9
(b) High blood pressure	1	0	8	9
(c) Asthma	1	0	8	9
(d) Hearth diseases	1	0	8	9
(e) High cholesterol	1	0	8	9
(f) Thyroid problems	1	0	8	9
(g) Arthritis	1	0	8	9
(h) Nervous diseases (emotional)	1	0	8	9
(i) Migraine headaches	1	0	8	9
(j) Vaginal bleeding	1	0	8	9
(k) Other _____ *Specify*	1	0	8	9

80. For the age that you have. How do you rate your health? |__|
[READ ALTERNATIVES]

(1) Good
(2) Regular
(3) Bad

J. KNOWLEDGE ABOUT EXISTING SERVICES

NOW WE ARE GOING TO ASK A FEW QUESTIONS ABOUT THE PLACES WHERE MAMMOGRAMS ARE DONE.

81. Do you know of any places where mammograms (breast x-rays) are done? |__|

(1) Yes (a) Name at least one place:_____

(0) No ..... ***GO TO SECTION K***

82. Do you know any places where you can go to have a mammogram (breast x-ray)? |__|

(1) Yes (a) Name at least one place:_____

(0) No

K. SOCIOECONOMIC INFORMATION

THIS IS THE LAST SECTION OF THE INTERVIEW. THESE QUESTIONS REFER TO YOUR HOME.

83. How many people live in your home? |__||__|

> INTERVIEWER: IF THE INTERVIEWEE LIVES ALONE, WRITE ONE (01) AND GO TO QUESTION # 85.

84. Who do you live with?

> **INTERVIEWER: READ ALL OF THE ALTERNATIVES. WRITE ONE (1) FOR EACH ALTERNATIVE MENTIONED BY THE INTERVIEWEE. WRITE ZERO (0) IF AN ALTERNATIVE IS NOT MENTIONED.**

(a) Husband (Spouse/Partner) ..... |__|

(b) Daughter(s) ..... |__|

(c) Son(s) ..... |__|

(d) Grandchild (Grandchildren) ..... |__|

(e) Sister(s) or Brother(s) ..... |__|

(f) Other family member ..... |__|

(g) Friend(s) ..... |__|

(h) Other person _____ ..... |__|
SPECIFY

85. What are your household's sources of income?

> **INTERVIEWER: READ ALL OF THE ALTERNATIVES. WRITE ONE (1) FOR ALL OF THE SOURCES MENTIONED BY THE INTERVIEWEE. WRITE ZERO (0) FOR ANY ALTERNATIVE NOT MENTIONED.**

(a) My own salary ..... |__|

(b) My husband's salary ..... |__|

(c) Economic Assistance Programs (Welfare) ..... |__|

(d) Nutritional Assistance Programs (food stamps, work/food stamps) ..... |__|

(e) Social Security ..... |__|

(f) Retirement Pension ..... |__|

(g) Financial assistance from child (children) ..... |__|

(h) Financial assistance from parents ..... |__|

(i) Rent from properties or house ..... |__|

(j) Own business ..... |__|

(k) Child support for one or more children ..... |__|

(l) Other sources _____ .... |__|
SPECIFY

THAT WAS THE LAST QUESTION. WE THANK YOU VERY MUCH FOR YOUR COOPERATION AND YOUR TIME TO RESPOND TO THESE QUESTIONS.
THANK YOU VERY MUCH!

REMINDER TO INTERVIEWER

CHECK THAT YOU HAVE THE FOLLOWING DOCUMENTS:

- ✓ **SIGNED CONSENT FORM**
- ✓ **SIGNED RECEIPT FOR APPRECIATION GIFT**
- ✓ **IDENTIFIED QUESTIONNAIRE**

THANK THE PARTICIPANT AGAIN
FOR HER COOPERATION AND ASSISTANCE!

APPENDIX 3

Project Title: ***Mammogram Compliance Among Middle-Aged Women in Puerto Rico***

Grant Number: U.S Army Medical Research and Materiel Command
DAMD17-99-1-9359

Principal Investigator: Melba Sánchez Ayéndez, Ph.D.
Graduate School of Public Health
University of Puerto Rico

Control Number:

☐-☐☐☐-☐

Mark all of the appropriate boxes to indicate your speciality and/or type of clinical practice:

Family physician	☐	Oncology	☐
Gerontology	☐	General Medicine	☐
Obstetrics/Gynecology	☐	Other	☐
Internal Medicine	☐		

Age: __ __

Gender:
Female ☐
Male ☐

General Instructions:

I. Evaluate each of the following cases as if you were the primary physician of the patient in charge of her ongoing care. Please answer the questions to the right in each case. (CBE = Clinical Breast Exam; BSE= Breast self-exam)

Case 1:

41 year old architect, G3P3A0, first pregnancy at age 26. Her mother died of pulmonary embolism at age 59, and her father died of laryngeal cancer at age 72. She is very afraid of radiation and asks if she could wait until age 50 to get her first mammogram.

1. Would you recommend that this patient have:
   a. A screening mammogram? No [ ] Yes [ ] Don't know [ ]
   b. A diagnostic mammogram? No [ ] Yes [ ] Don't know [ ]
   c. A sonomammogram? No [ ] Yes [ ] Don't know [ ]
   d. Follow-up/CBE/BSE No [ ] Yes [ ] Don't know [ ]

2. If you would recommend any or various of the above mentioned exams, mark the reason for the referral:
   a. Age No [ ] Yes [ ] Specify_____
   b. Risk Factor No [ ] Yes [ ] Specify_____
   c. Symptoms/Signs No [ ] Yes [ ] Specify_____

Case 2:

48 year old Columbian immigrant, G4P4A0, housewife, first pregnancy at age 16. Arrived in PR in 1994 but does not have medical insurance. She claims that she has never been sick before, but is very concerned because a paternal aunt was diagnosed with breast cancer last month.

1. Would you recommend that this patient have:
   a. A screening mammogram? No [ ] Yes [ ] Don't know [ ]
   b. A diagnostic mammogram? No [ ] Yes [ ] Don't know [ ]
   c. A sonomammogram? No [ ] Yes [ ] Don't know [ ]
   d. Follow-up/CBE/BSE No [ ] Yes [ ] Don't know [ ]

2. If you would recommend any or various of the above mentioned exams, mark the reason for the referral:
   a. Age No [ ] Yes [ ] Specify_____
   b. Risk Factor No [ ] Yes [ ] Specify_____
   c. Symptoms/Signs No [ ] Yes [ ] Specify_____

Case 3:

62 year old housewife, G2P2A0, with a negative mammogram 2 months ago. Complains of pain in left breast since her 1½ year old grandson "kicked" her in this breast five weeks ago. The breast is red, indurated and looks larger than the right breast.

1. Would you recommend that this patient have:
   a. A screening mammogram? No [ ] Yes [ ] Don't know [ ]
   b. A diagnostic mammogram? No [ ] Yes [ ] Don't know [ ]
   c. A sonomammogram? No [ ] Yes [ ] Don't know [ ]
   d. Follow-up/CBE/BSE No [ ] Yes [ ] Don't know [ ]

2. If you would recommend any or various of the above mentioned exams, mark the reason for the referral:
   a. Age No [ ] Yes [ ] Specify_____
   b. Risk Factor No [ ] Yes [ ] Specify_____
   c. Symptoms/Signs No [ ] Yes [ ] Specify_____

Case 4:

40 year old secretary, G1P1A0, (gave birth at age 33), visits her gynecologist regularly. During each check-up she receives a clinical breast exam. The last exam was negative. Two weeks ago she found a dark spot on her bra. Squeezing the nipple produces a drop of reddish liquid.

1. Would you recommend that this patient have:
   a. A screening mammogram? No [ ] Yes [ ] Don't know [ ]
   b. A diagnostic mammogram? No [ ] Yes [ ] Don't know [ ]
   c. A sonomammogram? No [ ] Yes [ ] Don't know [ ]
   d. Follow-up CBE/BSE No [ ] Yes [ ] Don't know [ ]

2. If you would recommend any or various of the above mentioned exams, mark the reason for the referral:
   a. Age No [ ] Yes [ ] Specify_____
   b. Risk Factor No [ ] Yes [ ] Specify_____
   c. Symptoms/Signs No [ ] Yes [ ] Specify_____

Case 5:

45 year old executive who keeps herself very slim with a vegetarian diet, sports, civic and cultural activities.

1. Would you recommend that this patient have:
   a. A screening mammogram? No [ ] Yes [ ] Don't know [ ]
   b. A diagnostic mammogram? No [ ] Yes [ ] Don't know [ ]
   c. A sonomammogram? No [ ] Yes [ ] Don't know [ ]
   d. Follow-up CBE/BSE No [ ] Yes [ ] Don't know [ ]

2. If you would recommend any or various of the above mentioned exams, mark the reason for the referral:
   a. Age No [ ] Yes [ ] Specify_____
   b. Risk Factor No [ ] Yes [ ] Specify_____
   c. Symptoms/Signs No [ ] Yes [ ] Specify_____

Case 6:

64 year old widow, G1P1A0, with DM, dependent on insulin since age 41; obese. Patient has recently been diagnosed with Alzheimer and her daughter is going to put her in a home for the elderly. Her only insurance is PR Health Reform.

1. Would you recommend that this patient have:
   a. A screening mammogram? No [ ] Yes [ ] Don't know [ ]
   b. A diagnostic mammogram? No [ ] Yes [ ] Don't know [ ]
   c. A sonomammogram? No [ ] Yes [ ] Don't know [ ]
   d. Follow-up CBE/BSE No [ ] Yes [ ] Don't know [ ]

2. If you would recommend any or various of the above mentioned exams, mark the reason for the referral:
   a. Age No [ ] Yes [ ] Specify_____
   b Risk Factor No [ ] Yes [ ] Specify_____
   c. Symptoms/Signs No [ ] Yes [ ] Specify_____

Case 7:

43 year old housewife, G6P5A1, whose first pregnancy was at age 17. Patient says that she has fibrocystic disease but has not had a breast biopsy.

1. Would you recommend that this patient have:
   a. A screening mammogram? No [ ] Yes [ ] Don't know [ ]
   b. A diagnostic mammogram? No [ ] Yes [ ] Don't know [ ]
   c. A sonomammogram? No [ ] Yes [ ] Don't know [ ]
   d. Follow-up CBE/BSE No [ ] Yes [ ] Don't know [ ]

2. If you would recommend any or various of the above mentioned exams, mark the reason for the referral:
   a. Age No [ ] Yes [ ] Specify_____
   b. Risk Factor No [ ] Yes [ ] Specify_____
   c. Symptoms/Signs No [ ] Yes [ ] Specify_____

Case 8:

18 year old student who has been sexually active since age 15, has an egg-like mass in the lower inner quadrant of the left breast.

1. Would you recommend that this patient have:
   a. A screening mammogram? No [ ] Yes [ ] Don't know [ ]
   b. A diagnostic mammogram? No [ ] Yes [ ] Don't know [ ]
   c. A sonomammogram? No [ ] Yes [ ] Don't know [ ]
   d. Follow-up CBE/BSE No [ ] Yes [ ] Don't know [ ]

2. If you would recommend any or various of the above mentioned exams, mark the reason for the referral:
   a. Age No [ ] Yes [ ] Specify_____
   b. Risk Factor No [ ] Yes [ ] Specify_____
   c. Symptoms/Signs No [ ] Yes [ ] Specify_____

Case 9:

40 year old teacher, G2P2A0, with a history of Hodgkin's disease in the mediastinum, treated with radiation therapy at age 13. Patient has annual follow-up visits.

1. Would you recommend that this patient have:
   a. A screening mammogram? No [ ] Yes [ ] Don't know [ ]
   b. A diagnostic mammogram? No [ ] Yes [ ] Don't know [ ]
   c. A sonomammogram? No [ ] Yes [ ] Don't know [ ]
   d. Follow-up CBE/BSE No [ ] Yes [ ] Don't know [ ]

2. If you would recommend any or various of the above mentioned exams, mark the reason for the referral:
   a. Age No [ ] Yes [ ] Specify_____
   b.. Risk Factor No [ ] Yes [ ] Specify_____
   c. Symptoms/Signs No [ ] Yes [ ] Specify_____

Case 10:

28 year old nurse, G0P0A0, with a history of thelarche during childhood. Patient does not complain of any breast discomfort, but is considering undergoing surgery to increase breast size.

1. Would you recommend that this patient have:
   a. A screening mammogram? No [ ] Yes [ ] Don't know [ ]
   b. A diagnostic mammogram? No [ ] Yes [ ] Don't know [ ]
   c. A sonomammogram? No [ ] Yes [ ] Don't know [ ]
   d. Follow-up CBE/BSE No [ ] Yes [ ] Don't know [ ]

2. If you would recommend any or various of the above mentioned exams, mark the reason for the referral:
   a. Age No [ ] Yes [ ] Specify_____
   b. Risk Factor No [ ] Yes [ ] Specify_____
   c. Symptoms/Signs No [ ] Yes [ ] Specify_____

Case 11:

41 year old journalist, G6P4A2 who had a breast biopsy five years ago. The pathological diagnosis was atypical hyperplasia.

1. Would you recommend that this patient have:
   a. A screening mammogram? No [ ] Yes [ ] Don't know [ ]
   b. A diagnostic mammogram? No [ ] Yes [ ] Don't know [ ]
   c. A sonomammogram? No [ ] Yes [ ] Don't know [ ]
   d. Follow-up CBE/BSE No [ ] Yes [ ] Don't know [ ]

2. If you would recommend any or various of the above mentioned exams, mark the reason for the referral:
   a. Age No [ ] Yes [ ] Specify_____
   b. Risk Factor No [ ] Yes [ ] Specify_____
   c. Symptoms/Signs No [ ] Yes [ ] Specify_____

Case 12

47 year old minister, G4P3A1. Her 28 year old daughter was diagnosed with breast cancer two weeks ago. Last week the daughter was informed that the BRCA1 test was positive.

1. Would you recommend that this patient do:
   a. A screening mammogram? No [ ] Yes [ ] Don't know [ ]
   b. A diagnostic mammogram? No [ ] Yes [ ] Don't know [ ]
   c. A sonomammogram? No [ ] Yes [ ] Don't know [ ]
   d. Follow-up CBE/BSE No [ ] Yes [ ] Don't know [ ]

2. If you would recommend any or various of the above mentioned exams, mark the reason for the referral:
   a. Age No [ ] Yes [ ] Specify_____
   b. Risk Factor No [ ] Yes [ ] Specify_____
   c. Symptoms/Signs No [ ] Yes [ ] Specify_____

II. Please answer the following questions:

1. During the past 12 months:
   a. What percentage of your female patients were **less than** 50 years of age? _____%
   b. What percentage of your patients who received a referral for a mammogram complied with the referral?____%
   c. Of those patients who did not comply with the referral, what were the reasons they gave for not getting the exam?
      i. _____
      ii. _____
      iii. _____

2. What are your guidelines for screening mammograms for women **below** age 50? (40-49 years)?
   a. _____
   b. _____
   c. _____

3. What are your guidelines for screening mammograms for women **over** age 50?
   a. _____
   b. _____
   c. _____

4. What are your guidelines for screening mammograms for women **over** age 65?
   a. _____
   b. _____
   c. _____

5. The information that your patients receive about breast cancer primarily comes from: ***(Please mark only one of the choices)***:

☐ Written educational materials
☐ Educational videos in the office
☐ You inform each patient according to her specific characteristics
☐ You refer patients to the nurse for orientation
☐ You refer patients to the health educator
☐ You answer patients' questions
☐ Other:_____

APPENDIX 4

PROJECT: MAMMOGRAN COMPLIANCE AMONG MIDDLE-AGED WOMEN IN PUERTO RICO

PARTICIPANT CONTROL CARD(PCC)

METROPOLITAN AREA

PARTICIPANT DATA	
Control Number:	|__|-|__ __ __|-|__|
Participant's Name:	
Home Address:	
Other Address:	
HomeTelephone:	
Other Telephone:	

GENERAL INFORMATION	
Health Center #|__ __|:	
Last date of referral from center:	|__ __||__ __||__ __ __ __| (DAY) (MONTH) (YEAR)
Last date of referral indicated by interviewee for Question #32-a (if applicable):	|__ __||__ __||__ __ __ __| (DAY) (MONTH) (YEAR)

CONTACTS WITH PARTICIPANT			
Notes of contacts:	Contact by Telephone	Personal Contact	Date of Contact (day/month/year)
1.			
2.			
3.			
4.			
5.			

	Complete	Incomplete	Refused	No able to Locate	Other Status:
Interview Status:					
Date Interview Completed:	|__ __||__ __||__ __ __ __| (DAY) (MONTH) (YEAR)				
Interviewer Number:	|__ __|				

OBSERVATIONS:

_____

_____

_____

_____

PROJECT: MAMMOGRAN COMPLIANCE AMONG MIDDLE-AGED WOMEN IN PUERTO RICO

PARTICIPANT CONTROL CARD(PCC)

NON METROPOLITAN AREA

PARTICIPANT DATA	
Control Number:	|__|-|__ __ __|-|__|
Participant's Name:	
Home Address:	
Other Address:	
HomeTelephone:	
Other Telephone:	

GENERAL INFORMATION	
Health Center #|__ __|:	
Last date of referral from center:	|__ __||__ __||__ __ __ __| (DAY) (MONTH) (YEAR)
Last date of referral indicated by interviewee for Question #32-a (if applicable):	|__ __||__ __||__ __ __ __| (DAY) (MONTH) (YEAR)

CONTACTS WITH PARTICIPANT			
Notes of contacts:	Contact by Telephone	Personal Contact	Date of Contact (day/month/year)
1.			
2.			
3.			
4.			
5.			

	Complete	Incomplete	Refused	No able to Locate	Other Status:
Interview Status:					
Date Interview Completed:	|__ __||__ __||__ __ __ __| (DAY) (MONTH) (YEAR)				
Interviewer Number:	|__ __|				

OBSERVATIONS:

_____

_____

_____

_____

APPENDIX 5

UNIVERSITY OF PUERTO RICO / MEDICAL SCIENCES CAMPUS
BIOSOCIAL SCIENCES FACULTY AND GRADUATE SCHOOL OF PUBLIC HEALTH
INTERDISCIPLINARY RESEARCH ON WOMEN'S HEALTH

PROJECT TITLE: MAMMOGRAM COMPLIANCE AMONG MIDDLE-AGED WOMEN IN PUERTO RICO

GRANT NUMBER: U.S. ARMY MEDICAL RESEARCH AND MATERIEL COMMAND DAMD17-99-1-9359
PRINCIPAL INVESTIGATOR: MELBA SÁNCHEZ AYÉNDEZ, PH.D.

CONTROL NUMBER: (OFFICIAL USE)
☐-☐☐☐-☐

FORM TO EVALUATE ELIGIBILITY OF PARTICIPANTS

1. HEALTH CENTER:
   - ☐ (1) Community Health Center Dr. José S. Belaval
   - ☐ (2) Río Grande Community Health Center
   - ☐ (3) Other Center_____

2. RECORD NUMBER:
   ☐☐☐☐☐☐☐☐

3. (a) BIRTH DATE: __ __ / __ __ / __ __ __ __
   (Day) (Month) (Year)

   (b) Was the patient born between January 1, 1934 and December 31, 1957?

   - ☐ Yes ➡ Go to Question #5
   - ☐ No ➡ Not eligible, end of record review.
   - ☐ Date of birth not available ➡ Go to Question #4

4. (a) If the date of birth is not available, verify the woman's age in the record and calculate the age as of January 1, 1998: __ __ Years (*USE TABLE 1 TO CALCULATE AGE*)
   (Age)

   (b) Is the patient older than 39or younger than 65 as of January 1, 1998?
   - ☐ Yes ➡ Eligible, go to Question #5
   - ☐ No ➡ Not eligible, end of record review.
   - ☐ Date of birth not available ➡ Not eligible, end of record review.

5. (a) Has only one referral ☐ has more than one referral ☐ for a mammogram dated after January 1, 1998
   - ☐ Yes ➡ Date #1 __ __ / __ __ / __ __ __ __ (Day) (Month) (Year) Physician: _____
     Date #2 __ __ / __ __ / __ __ __ __ (Day) (Month) (Year) Physician: _____
     Date #3 __ __ / __ __ / __ __ __ __ (Day) (Month) (Year) Physician: _____
     Date #4 __ __ / __ __ / __ __ __ __ (Day) (Month) (Year) Physician: _____
   - ☐ No referral after January 1, 1998.

(b) **REASONS FOR REFERRAL FOR MAMMOGRAM**

Mark all of the reasons found in the record and note the date (day/month/year)

	DATE		DATE
☐ History of breast cancer	_____	☐ Persistent pain	_____
☐ History of atypical hyperplasia	_____	☐ Injury to breast	_____
☐ History of lobular carcinoma in situ (LCIS)	_____	☐ Changes in the skin/hematomas	_____
☐ History of breast biopsy	_____	☐ Retraction (collapse)	_____
☐ Hardening in breasts	_____	☐ Ulceration	_____
☐ Presence of mass, growth	_____	☐ No symptoms in record	_____
☐ Adenopathy in armpit	_____	☐ Other:_____	_____
☐ Suppuration or secretions from nipples	_____		

6. (a) Are there results from mammograms completed after January 1, 1998?

☐ Yes ➡ Date of last mammogram __ __/__ __/__ __ __ __
(Day) (Month) (Year)

☐ No ➡ If there is a referral for a mammogram (see Question #5) go to Question #7. If there is **NO** referral (see Question #5) and there are no results from the mammogram, the record review is terminated.

(b) Results of the mammogram: _____

_____

_____

_____

7. Is there any evidence (documents, receipts, notes in progress reports) that there was an individual orientation about early detection screening, risk factors or breast cancer?

☐ Yes ➡ Type of evidence: ☐Receipt ☐Progress Report ☐Other: _____

☐ No

8. **CONTACT PERSON INFORMATION:**

(a) Name: _____ _____ _____
Paternal Last Name Maternal Last Name First Name

(b) Home address: _____

_____

(c) Mailing address: _____

_____

(d) Other address (If not the patient's address, specify name and/or family relationship):

_____

_____

(e) Home telephone: __ __ __ - __ __ __ __

(f) Work telephone: __ __ __ - __ __ __ __ Extension: __ __ __ __

(g) Other telephone: __ __ __ - __ __ __ __

(g.1.) Place or name of person with this telephone number: _____

COMMENT SHEET
RECORD REVIEW

DATE OF RECORD REVIEW: __ __/__ __/__ __ __ __
(DAY) (MO.) (YEAR)

Note: When you write additional information about a specific question on this form, include the question number.

RECORD NUMBER:
☐☐☐☐☐☐☐☐

APPENDIX 6

PROJECT: MAMMOGRAN COMPLIANCE AMONG MIDDLE-AGED WOMEN IN PUERTO RICO

PARTICIPANT CONTROL CARD(PCC)

METROPOLITAN AREA

PARTICIPANT DATA		
Control Number:	|__|-|__ __ __|-|__|	
Participant's Name:		
Home Address:		
Other Address:		
HomeTelephone:		
Other Telephone:		
Birth Date:	|__ __|__ __|__ __ __ __| (DAY) (MONTH) (YEAR)	Other Birth Date: |__ __|__ __|__ __ __ __| (DAY) (MONTH) (YEAR

GENERAL INFORMATION	
Health Center #|__ __|:	
Last date of referral from center:	|__ __|__ __|__ __ __ __| (DAY) (MONTH) (YEAR
Last date of referral indicated by interviewee for Question #30-a (if applicable):	|__ __|__ __|__ __ __ __| (DAY) (MONTH) (YEAR

CONTACTS WITH PARTICIPANT			
Notes of contacts:	Contact by Telephone	Personal Contact	Date of Contact (day/month/year)
1.			
2.			
3.			
4.			
5.			

INTERVIEW INFORMATION		
Temporal Estatus Interview: (write down estatus and the date)		
Final Estatus Interview :		Date Interview Completed : |__ __|__ __|__ __ __ __| (DAY) (MONTH) (YEAR)
Interviewer Number ID:	|__ __|	Assigned Date: |__ __|__ __|__ __ __ __| (DAY) (MONTH) (YEAR)

OBSERVATIONS: _____

PROJECT: MAMMOGRAN COMPLIANCE AMONG MIDDLE-AGED WOMEN IN PUERTO RICO

PARTICIPANT CONTROL CARD(PCC)

NON METROPOLITAN AREA

PARTICIPANT DATA			
Control Number:	|__|-|__ __ __|-|__|		
Participant's Name:			
Home Address:			
Other Address:			
HomeTelephone:			
Other Telephone:			
Birth Date:	|__ __|__ __|__ __ __ __| (DAY) (MONTH) (YEAR)	Other Birth Date:	|__ __|__ __|__ __ __ __| (DAY) (MONTH) (YEAR

GENERAL INFORMATION	
Health Center #|__ __|:	
Last date of referral from center:	|__ __|__ __|__ __ __ __| (DAY) (MONTH) (YEAR
Last date of referral indicated by interviewee for Question #30-a (if applicable):	|__ __|__ __|__ __ __ __| (DAY) (MONTH) (YEAR

CONTACTS WITH PARTICIPANT			
Notes of contacts:	Contact by Telephone	Personal Contact	Date of Contact (day/month/year)
1.			
2.			
3.			
4.			
5.			

INTERVIEW INFORMATION		
Temporal Estatus Interview: (write down estatus and the date)		
Final Estatus Interview :		Date Interview Completed : |__ __|__ __|__ __ __ __| (DAY) (MONTH) (YEAR)
Interviewer Number ID:	|__ __|	Assigned Date: |__ __|__ __|__ __ __ __| (DAY) (MONTH) (YEAR)

OBSERVATIONS: _____

APPENDIX 7

University of Puerto Rico
Medical Sciences Campus
Faculty of Biosocial Sciences and Graduate School of Public Health
Department of Human Development
P.O. Box 365067, San Juan, Puerto Rico 00936-5067

Consent Form (Survey and Pre-test of Survey Questionnaire)

Study: MAMMOGRAM COMPLIANCE AMONG LOW-INCOME MIDDLE-AGED WOMEN IN PUERTO RICO

Investigators: Melba Sánchez-Ayéndez, PhD (PI)
Cruz María Nazario-Delgado, PhD (Co-I)
Ana L. Dávila-Román, PhD (Co-I)
Marta Bustillo, MA, ABD (Co-I)

We are conducting a study about screening mammography as a practice among women 40 to 64 years of age in Puerto Rico. We would like to ask you some questions about breast cancer and screening practices. The principal objectives of this study are to:

(1) determine which variables are better predictors of screening mammography compliance among middle-aged women (40-64) in Puerto Rico
(2) verify factors which could be affecting physicians' referrals to screening mammograms

The questions should not take more than an hour to answer. Your participation in the study is completely voluntary and you have the right to refuse participating in our research or finish the interview at any moment you desire. Persons who finish the interview will be paid $10. Aside from this small stipend, there will be no direct benefits for the participants in this study. However, results from the investigation are expected to have a positive impact on breast cancer screening services. You will not incur in any cost for participating.

All necessary measures to guarantee confidentiality of the information that you offer will be taken and your identity will not be revealed. If you agree to participate, we ask you to sign your name or make a mark in the space provided after you have read this consent form or it has been read to you. A witness will also sign the consent form. Both you and the witness should initial and date the first page of this document and sign the last page as an indication that the document has been read and understood. The consent form with your signature will be kept in a locked file to assure confidentiality; you will receive a copy of the form.

IRB APPROVED
University of Puerto Rico FROM 5-25-00 TO 5-25-01
Medical Sciences Campus
San Juan, Puerto Rico
IRB CHAIRPERSON

If you have any doubt or additional questions about this study, you can contact by phone Dr. Melba Sánchez-Ayéndez, telephone 758-2525, extension 1455 or Dr. Cruz María Nazario, telephone 758-2525, extension 1429 at the School of Public Health of the Medical Sciences Campus of the University of Puerto Rico. If you have any doubts about your rights, you can call Dr. Alan Preston, President of the Institutional Review Board at 758-2525 extension 1713.

FDA representatives may review and inspect the records at any time, thus, learning the subject's identity, as required by Section 50.25(a) of current FDA regulations. U.S. Army Medical Research, Development, Acquisition and Logistics Command are eligible to inspect records of this research as part of their responsibilities to protect human subjects in research.

This study presents no personal risk since it does not involve any medicine or clinical treatment. In the event of physical and/or mental injury resulting from your voluntary participation in this research study, you have the right to receive medical treatment free of charge at the University Hospital or any other hospital designated by the Chancellor of the Medical Sciences Campus of the University of Puerto Rico. You are authorized all necessary medical care for injury or disease which is the direct result of your participation in this research. Other than medical care, you will not receive any other compensation for your participation in this research study; however, you understand that this is not a waiver or release of your legal rights.

By signing or placing an X on this consent form, you indicate that you understand the objectives of this investigation and the implications of your participation , and also that all the questions that you had related to the study have been answered satisfactorily.

_____	_____
Participant's signature	Principal Investigator's signature
_____	_____
Participant's name	Name of Principal Investigator
_____	_____
Witness' name	Witness' signature

Address: _____

_____

Telephone: _____

Date: _____

I certify that this is an accurate and true translation.

_____

Melba Sánchez-Ayéndez, Ph.D.

Address: Department of Human Development, Graduate School of Public Health, University of Puerto Rico Medical Sciences Campus, PO Box 365067, San Juan, Puerto Rico 00936-5067. Telephone: (787) 758-2525 Ext. 1455. Fax: (787) 763-0161 & 759-6719

IRB APPROVED
University of Puerto Rico FROM 6 25 00 TO 5 25 01
Medical Sciences Campus
San Juan Puerto Rico

APPENDIX 8

UNIVERSIDAD DE PUERTO RICO, RECINTO DE CIENCIAS MÉDICAS

PO BOX 365067 SAN JUAN, PUERTO RICO 00936-5067 TELS. 763-2443
FAX 751-6242

CENTRO DE CÁNCER

August 14, 2001

Dr. Melba Sánchez-Ayéndez
Graduate School of Public Health
Medical Sciences Campus
University of Puerto Rico

Dear doctor Sánchez-Ayéndez:

I am very pleased with this year's results from the study "Mammogram compliance among low-income middle aged women in Puerto Rico" that focus on physicians' knowledge of 1997 NIH guidelines on screening. I am glad that the project has led to the establishment of working links with the Puerto Rico Cancer Center of the University of Puerto Rico.

I am looking forward to working with you in the approved proposal for the Atlantea project and its future offshoots. I am particularly interested in the health promotion plans for Atlantea, an offshoot from the "Mammogram compliance among low-income middle aged women in Puerto Rico" study as well as the one that we have on education with the Moffitt Cancer Center.

Sincerely,

Nayda Figueroa, MD
Associate Director

PATRONO CON IGUALDAD DE OPORTUNIDAD EN EL EMPLEO M/M/V/I

APPENDIX 9

Río Grande Community Health Center, Inc.

Calle Pimentel Y Castro # 200
PO Box 786 Río Grande, Puerto Rico 00745
Tel/Fax (787) 887-1335

August 15, 2001

Dr. Melba Sánchez-Ayéndez
Graduate School of Public Health
University of Puerto Rico
PO Box 365067
San Juan, Puerto Rico 00936-5067

Dear Dr. Sánchez-Ayéndez:

Thank you for sharing with us your findings on the focus groups with women in your research project " Mammography Compliance among Low Income middle-aged Women in Puerto Rico:. We sincerely appreciate the opportunity to collaborate with you.

I will like to discuss with you the plans in the original proposal regarding a breast cancer health education program. Should you need to conduct a pilot study, please consider our centers to implement it. For any concern or collaboration, do not hesitate to contact me.

Finally, I want to congratulate you for your excellent research work and hope you receive the well deserved finical support for future projects.

Sincerely,

Ángel Rafael Braña, MD, MPH
Corporate Clinical Director

APPENDIX 10

UNIVERSIDAD DE PUERTO RICO, RECINTO DE CIENCIAS MEDICAS

PROGRAMA Y "ABSTRACTS"

18 AL 20 DE ABRIL DE 2001

"Reforma de Salud, Educación y Servicios de Salud a Distancia: Retos y Evolución para los Centros de Salud Académicos en la Nueva Década"

XXII FORO DE INVESTIGACIÓN CIENTÍFICA
18 al 20 de abril de 2001

18 y 19 de abril a.m.
Anfiteatro Sexto Piso

19 de abril p.m.
Centro de Estudiantes, Segundo Piso

20 de abril
Intercontinental San Juan Hotel

P-30

Breast Cancer and Screening Knowledge among Physicians in Puerto Rico. M. Sánchez Ayéndez; C.M. Nazario; N. Figueroa; A.L. Dávila, M. Bustillo, M.C. Larruiz; G. Martínez. School of Public Health, University of Puerto Rico.

A focus group was conducted among a group of physician to obtain qualitative data about knowledge and compliance with breast cancer screening guidelines. Mammography for low-income and minority women is an important intervention issue as it is still under-used by minority and low-income women. The results discussed hereinafter pertain to the first phase of a larger study funded by DoDBCRP that focuses on compliance with the screening guidelines among low-income middle-aged women in Puerto Rico. The main objective of the focus group was to obtain qualitative data about the appropriateness of an instrument of semi-structured and open-ended questions with the simulation of case studies to obtain the factors that explain screening mammogram referral patterns and knowledge about screening guidelines (NIH Consensus, 1997) among physicians in different clinical settings. In general terms, the focus group helped us identify areas where the instrument needed improvement while minimizing bias (desirability). The group did not consider the instrument too long, too time consuming, or that any case studies had to be eliminated. They discussed the case studies and agreed that some were more difficult to answer than others. It was clear from the focus group that referral patterns vary according to the medical practice and clinical setting, and with patients' characteristics. The issues of cost, cost-effectiveness, capitation and type of health insurance were a major concern for most of the participants. Such issues are probably modifying the way physicians are following the referral guidelines for breast cancer screening mammograms. The group commented on the difficulties that physicians are facing in practicing "good medicine" with such restrictions.

APPENDIX 11

UNIVERSIDAD DE PUERTO RICO, RECINTO DE CIENCIAS MEDICAS

PROGRAMA Y "ABSTRACTS"

18 AL 20 DE ABRIL DE 2001

"Reforma de Salud, Educación y Servicios de Salud a Distancia: Retos y Evolución para los Centros de Salud Académicos en la Nueva Década"

XXII FORO DE INVESTIGACIÓN CIENTÍFICA
18 al 20 de abril de 2001

18 y 19 de abril a.m.
Anfiteatro Sexto Piso

19 de abril p.m.
Centro de Estudiantes, Segundo Piso

20 de abril
Intercontinental San Juan Hotel

P-2

Mammography Compliance among Middle-Aged Women in Puerto Rico. M. SÁNCHEZ AYÉNDEZ, A.L. DÁVILA, M. BUSTILLO, C.M. NAZARIO, M.C. LARRIUZ, G. MARTINEZ. School of Public Health, University of Puerto Rico, PO Box 365067, San Juan, Puerto Rico 00936.

Mammography for low-income and minority women is an important intervention issue as it is still under-used by minority and low-income women. The results discussed hereinafter pertain to the first phase (focus groups) of a larger study funded by DoDBCRP that focuses on compliance with the screening guidelines among low-income middle-aged women in Puerto Rico. Focus groups were conducted to gain insight to breast cancer and screening knowledge and attitudes, screening practices, and barriers to screening mammograms of low-income women ages 40 to 64. Two community health centers in different regions in Puerto Rico were selected: large metropolitan inner-city area and north-eastern area serving urban and rural populations. Seven focus groups were conducted. The results indicate that the participants view cancer as a cell disorder and that breast pain or discomfort is a factor associated to the disease. The women have knowledge of breast self exam, clinical breast exam and mammogram as early detection tests as well as of the usefulness of mammograms. No clear knowledge of current screening mammogram guidelines was found among the participants. Apprehensions about the discomfort caused by the mammography procedure and fear of a cancer diagnostic are the most prevalent personal barriers. Important systemic barriers for mammogram compliance are: economic factors, transportation and patient-physician relationship. The information obtained from the focus groups will be used to develop a culturally and socially sensitive questionnaire that will be used in a survey of 300 low-income middle- aged women in Puerto Rico.

APPENDIX 12

VANCOUVER 2001
WORLD CONGRESS OF GERONTOLOGY

THE XVIIth WORLD CONGRESS OF THE INTERNATIONAL ASSOCIATION OF GERONTOLOGY

July 1-6, 2001

2800 - 515 W. Hastings Street
Vancouver, BC V6B 5K3 Canada
Tel: 604-268-7972
Fax: 604-291-5066

Monday, April 09, 2001

Prof. M. Sánchez-Ayéndez
Gerontology Program, Graduate School of Public Health
University of Puerto Rico
Medical School Campus
PO Box 365067
SAN JUAN 00936-5067
PUERTO RICO

Dear Prof. Sánchez-Ayéndez,

We are very pleased to inform you that we have accepted the following abstract(s) for presentation at the 2001 World Congress of Gerontology, July 1-6, 2001. Please note that acceptance of your abstract commits you to be present at the Congress. If you have not registered, you may do so on-line at www:harbour.sfu.ca/iag/. If this is not possible, please mail or fax your registration. If it is necessary to contact us, please quote the PIN number listed below.

PIN: 2172

Presentation Details

Abstract Title: Obstacles to Mammography Compliance Among Low-Income Middle-Aged Women in Puerto Rico

Author: M. Sánchez-Ayéndez, C. M. Nazario, A.L. Dávila, M. Bustillo, M.C. Larriuz, G. Martínez, N. Figueroa

Presentation Type: Poster

Session: Wednesday AM Posters

Date: Wednesday, July 04, 2001

Session Start Time: 8:30am

Many sessions will be videotaped for possible webcasting, reproduction and sale by the Congress. If you do not wish to have your session recorded, you must notify us by fax or e-mail by May 1, 2001. Also please note that while we can guarantee that there will be overhead and slide projectors in all rooms, LCDs are limited and we may not be able to supply all those requested. You should therefore prepare your presentation in both LCD and an alternate presentation form.

Sincerely,

Dr. Andrew Wister
Chair, Scientific Program
2001 World Congress of

Dr. Gloria Gutman
President
2001 World Congress of Gerontology

9. Health and Quality of Life
Vicente Spinola Dias Neto, Giselle H. De P. Rodrigues, Juliana P. Magnatti, BRAZIL
10. Unknown Ischemic Optic Neuropathy in Elderly People
M. P. Serrano, J. M. Ramírez, A. Triviño, M. C. Tena-Dávila, SPAIN
11. Drug Toxicity in 90-year-old and Over Patients
L. Merle, T. Dantoine, Y. Nouaille, F. Bouthier, J. P. Charmes, FRANCE
12. You and Your Sensory Environment: A Life Long Learning Experience
Bev O'Sullivan, Klari Varallyai, CANADA
13. The Self-Perceived Handicap by Geriatric Institutionalized Population with Hearing Loss
K. M. M. Silveira, I. C. P. Russo, K. D. Soares, BRAZIL
14. Vitamin Intake and Transparency of Human Lens in Middle-Aged and Elderly Japanese
H. Nomura, T. Imai, F. Ando, N. Niino, H. Shimokata, Y. Miyake, JAPAN
15. Aging and Vision Loss - Implications for Service Providers and CNIB's Seniors Program
Leana Burkey, Cathie Dallas, CANADA
16. Back to Hearing: Rehabilitation in Presbycusis
Monica Gottschalk, ARGENTINA
17. Exercise Limitation in Elderly: Is Cardio-Pulmonary Exercise Testing Clinically Useful?
C.M. Chu, C.Y. Yung, V.L. Chan, G.C.Y. Wong, E.M.F. Leung, CHINA
18. Concept of Instincts and Age-Related Pathology Prevention Based on the Advances of Traditional Oriental Medicine
R. Roumyantsev, RUSSIA
19. Homebound Level and Mortality Among the Community-Dwelling Elderly
S. Yasumura, H. Imuta, A. Fukao, T. Ahiko, JAPAN
20. Is Lifestyle Important for Health Outcomes in Elderly Hong Kong Chinese?
J. Woo, S. C. Ho, HONG KONG
21. Predictors of Women's Intention to Use Dual Energy X-ray: Testing the Theory of Planned Behavior
P. Werner, I. Vered, Y. Shatz, ISRAEL
22. A Short Instrument to Assess Risk of Functional Impairment in the Elderly at the Community Setting
J. Silva, C. Albala, J. Jerez, A. Villalobos, C. Barros, M. C. Escobar, CHILE, I. McDowell, CANADA
23. Profile of a Brazilian Population
Vicente Spinola Dias Neto, Giselle H. De P. Rodrigues, Juliana P. Magnatti, BRAZIL
24. The Living Conditions of the Elderly with Chronic Renal Failure Under Hemodialysis Treatment
Rosalina Aparecida Partezani Rodrigues, BRAZIL
25. The Elderly Health Attention Group (GRASI): Report of Experience in a University Hospital
M.J.D. Diogo, M.F. Ceolim, F.A. Cintra, BRAZIL
26. Plasma Brain Natriuretic Peptides (BNP) Level in Community Dwelling Elderly is Associated With Functional Impairment
Masanori Nishinaga, Tomio Hamada, Takayuki Fukui, Kiyohito Okumiya, Yukari Morita, Daisuke Kuzume, Yoshinori Doi, Kozo Matsubayashi, JAPAN
27. Attitudes of Geriatric Patients Towards Adult Immunization
T. S. Narayanan, Shobhana Chaudhari, Francis Rice, Ana Miller, USA
28. Educative Action of a Multidisciplinary Team in a Secondary Prevention Program in Coronary Artery Disease
S. L. Medeiros, C. M. Bogus, BRAZIL
29. The Seniors Health Resource Team: A Demonstration Model - Clinic on Wheels
S. Lundstrom, E. Stelmack, A. Moore, CANADA
30. Nurse- Led Clinic for High Risk Older Patients
Tak-yin Lau, HONG KONG
31. Evaluation of the Handwashing Practice in the Prevention of Nosocomial Infections in Elderly
L. Fustier, E. Grandini, N. de Rekeneire, FRANCE
32. Developing an Injury Prevention Program - A Minimal Lift Policy
Debra Elm, CANADA
33. Psychosocial Variables in a Screening Study of Older Adults: Scale Development and Construct Validity
S. Koffman, G. Hicks, K. Arnette, P. Watkins, N, Jackson, R. Browers, L. Bennett, P. Hastings, Lily Sizemore, Joan Lawrence, Mike Johnson, Jessica Gallion, USA
34. Prevention of Ageing Dependence to 2006
Ricardo Moragas, Nuria Rodriguez Avila, Ramon Cristofol Allue, SPAIN
35. Obstacles to Mammography Compliance Among Low-Income Middle-Aged Women in Puerto Rico
M. Sánchez-Ayéndez, C. M. Nazario, A.L. Dávila, M. Bustillo, M.C. Larriuz, G. Martínez, N. Figueroa, PUERTO RICO
36. Healthy Brain Program: Novel Approach to Healthy Aging Promotion
Stephen J. Kiraly, Stephen G. Holiday, Brenda Bray, Rebecca Kiraly, CANADA
37. Colon Hydrotherapy in Treatment of Chronic Constipation
Sylvester Yong, SINGAPORE

continuous nursing care needs, such as patients with chronic wound ulcers and patients who had percutaneous endoscopic gastrostomy performed, seemed to benefit most from participation in the clinic. Results shown that if a healthcare provider is available to manage early signs and symptoms of deterioration of general health status of patients, hospital readmissions may be decreased and patient's outcomes may be improved. The provision of health education and counseling and the nurse specialist as the first point of contact for patients and caregivers encourages the families to take care of the elderly patients thus further improve the quality of life of these patients.

[31] Evaluation of Handwashing Practice in the Prevention of Nosocomial Infections in the Elderly

L.Fustier (Centre Gérontologique Départemental, Marseille, France), E.Grandini (InterClin-Noso 13,Marseille,France), N.de Rekeneire (National Institute on Aging, Bethesda, USA)

Nosocomial infections are a big public health problem and handling transmission is the principal cause . We conducted a study based on an audit on the handwashing practice in a geriatric hospital. 141 persons were observed, including 28 nurses, 64 nursing auxiliaries (47 %) , 28 housekeepers, 4 doctors, 2 nurse's chiefs and 6 students . In 78,7% of cases, the observations were realized during the day . The recommendations about the staff clothes are largely followed but the wearing of a wedding ring in 22,7% of cases is not correct . The mean time of the handwashing is 68,17 seconds . The time spent to soap the hands is 39,25 seconds and the time of rinsing is 28,92 seconds . This time differs according to the units . The handwashing duration is better in nurses and nursing auxiliaries. In the equipment preparation, 33% are not adapted: empty distributors...The opening dates are not noted on the bottles in 73,7% of cases . The rising time is not tidy in 54,6% . 23,4% of the persons dry one's hands by rubbing which is not correct . A risk of contamination is shown in 22,7% of people at the end of the practice . This evaluation shows that the staff really knows our protocol . The actions to start are to inform about the respect of the duration especially in rinsing . This audit permitted us to quantify the equipment and to improve it . Then, we rewrote our protocol regarding the results insistent on the time, the rinsing and drying . This audit only studied the quality of the handwashing, we plan to analyse in a second time the observance of this practice .

[32] Developing an Injury Prevention Program - A Minimal Lift Policy

Debra F. Elm (The Good Samaritan Society, Edmonton, Canada)

Staff injury from lifting and transferring residents are very costly and put the residents at risk for falls and injury. The Good Samaritan Society (GSS), a multi-site continuing care service provider, implemented a "Minimal Lift Policy". The objective of this policy is to prevent injury of both staff and residents while allowing the resident to use as much of their own ability as possible. A literature search was done to determine the risks and causes of injury while lifting and transferring. Each cause was evaluated and strategies were put into place. Transfer decision trees were developed to determine the appropriate transfer method for each resident. The number of residents that require each transfer type was determined using the decision tree to ascertain the number of mechanical lifts required. Lifts were then purchased. Education modules were developed which are mandatory for all staff to complete after which both knowledge and practice competencies must be demonstrated. Unit teams were formed to teach staff the transfer methods and to be consulted in unique situations. To evaluate the injury prevention program the residents were surveyed to determine their feelings of safety with the lifting before and after the program was implemented. A staff survey was completed to determine staff knowledge and the level of risk for injury. Injury rates and the costs of those injuries to the organization were compiled prior to implementation. The staff survey will be again completed and injury rates and costs will be again reviewed in three months time. The results will be available for the presentation.

[33] Psychosocial Variables in a Screening Study of Older Adults: Scale Development and Construct Validity

S. Koffman, G. Hicks, K. Arnette, P. Watkins, Lily Sizemore, Joan Lawrence, Mike Johnson, Jessica Gallion (Department of Psychology, Eastern Washington University, WA, USA), N. Jackson, R. Browers (Department of Counseling, Educational and Developmental Psychology , Eastern Washington University, WA, USA), L. Bennett, P. Hastings (Department of Counselor Education, Gonzaga University, WA, USA)

The screening study, which demographically and clinically defines the population, is an essential step in developing ethical methodology and adequate sampling procedures for ongoing research in geropsychology, as well as being integral in grant writing, program planning and service provision. Clarity of construct definition and increased validity in the variables of interest to the geropsychologist is accomplished through refinement of instrumentation. The present study addressed both of these needs. We assessed a variety of psychosocial variables across an eastern Washington State population of older persons (N= 500, mean age = 72) in both institutionalized and independent living conditions, in urban and rural settings, of diverse SES, race and ethnicity, and with a range of medical and psychiatric diagnoses. The variables included in the screening study were factor analyzed. They are: a demographics questionnaire, the Mental Status Exam, Instrumental Activities of Daily Living, Symptom CheckList- Revised (SCL 90-R), Subjective Quality of Life (SF-36), Geriatric Depression Scale (GDS), Life Satisfaction Inventory-A (LSIA), Irrational Beliefs Test (IBT), Ego Integrity Scale (EIS), and the GRAT, (a subjective experience of gratitude scale which is still in development). The descriptive statistics of the screening study variables and population norms will be presented. Further research will be suggested.

[34] Prevention of aging dependence to 2006

Ricardo Moragas Moragas (Gie, Pcb,Universitat De Barcelona, Barcelona, Spain) Nuria Rodriguez Avila (Gie, Pcb, Universitat De Barcelona, Barcelona, Spain) Ramon Cristofol Allue (Gie, Barcelona Science Park)

Purpose: The main objective is to analyze the demand dependan persons of Sanitary and Social Services up to the 2006 in Spain. Method: Estimate of the quantitative demand in cost of services for ages and sexes and qualitative for causes of the dependence through direct survery and demographic models based on current and future pathologies whose incidence will increase: Alzheimer's, Parkinson's, neurological, skeletal sclerosis, endocrine, etc. Valuation of innovations in prevention, cure and rehabilitation of the dependence that can reduce the demand of sanitary and social services. Results: Costs of dependence by personal services, medication and technical aids in each of 12 types of systems and pathologies. Conclusions: cost of dependence is increasing in most pathologies but growth is different and way slow in some pathologies. The spanish health and social services wil have to redesign its structure financially and service wise to cope with the increased demand.

[35] Obstacles to Mammography Compliance Among Low-Income Middle-Aged Women in Puerto Rico

M. Sánchez-Ayéndez, C. M. Nazario, A.L. Dávila, M. Bustillo, M.C. Larriuz, G. Martínez, N. Figueroa (Graduate School of Public Health, University of Puerto Rico Medical Sciences Campus, San Juan, Puerto Rico)

Despite evidence in favor of breast cancer screening with mammograms and that screening has increased in the last years, mammogram compliance among low-income, minority and women over 50 years of age has been slow. This poster presents the first stage of a three-year project that contemplates a study of low-income middle-aged women in Puerto Rico in regard to compliance with 1997 U.S.A. National Institutes of Health (NIH) screening mammogram guidelines. This first-stage centered on focus groups conducted to obtain qualitative data to develop instruments to be administered to women who will participate in

a survey. Women from different geographic regions in Puerto Rico who attend community health centers participated in the sessions. Focus groups results indicate that women view cancer as a cell disorder and that breast pain or discomfort is a factor associated to the disease. The women have knowledge of breast self-exam, clinical breast-exam, and mammogram as early detection tests as well as of the usefulness of mammograms over other methods. They indicated no clear knowledge of 1997 NIH guidelines. Apprehensions about the discomfort caused by the mammography procedure and fear of a cancer diagnostic were the most prevalent personal barriers for mammogram compliance. Other factors were: cost, lack of transportation, patient-physician-relationship, and conflicts with child-care-provider role. The focus groups served to incorporate pertinent issues to mammography compliance and vocabulary for the development of a questionnaire that will be applied to 200 women in 2001.

[36] Healthy Brain Program: Novel Approach to Healthy Aging Promotion

Stephen J. Kiraly (UBC, Vancouver, Canada) Stephen G. Holliday, (VMDA, Vancouver, Canada) Brenda Bray, (VCMHS, Vancouver Canada) Rebekah Kiraly (Trent U, Peterborough, Canada)

Purpose: To acquaint the participant to the brain as an organ which requires care and maintenance. Specifically, we expose inconclusive material, isolated reports and fads which may prove to be worthless or dangerous. We strive for evidence based facts which will clarify the confusing and often contradictory information from the marketplace. Method: A didactic and cognitively oriented approach is used. The program is modeled after healthy heart programs which abound. Additional features are developed specifically for brain health. A core lecture outline and eight workshop outlines, each corresponding to one of the Eight Pillars of Longevity, will be presented in a pictorial and text format. The Eight Pillars are: Safety, Nutrition, Physical Exercise, Cognitive Exercise, Sleep, Stress Management, Hormone Replacement and Treatment of Existing Disease. The information in each of the workshops is based on analysis of many studies and reports. References are provided. Results: Participants have been very enthusiastic, attendance has been excellent and they given very positive feedback. Most are eager to return for more presentations and workshops. Conclusion: The Healthy Brain Program has excellent audience participant acceptance and it appears to be a worthwhile effort. It may have efficacy similar to the already proven healthy heart programs. Systematized research is needed to evaluate effects of consistent participation in various groups. The program may have great preventive potential. If followed, it may greatly improve quality and length of life and it would reduce health costs.

[37] Colon hydrotherapy in treatment of chronic constipation

Sylvester Yong (Dotolo Research - Asia Singapore)

Purpose: To assess the effectiveness of colon hydrotherapy in the treatment of chronic constipation in the elderly. Common factors causing constipation in elderly include dehydration, poor diet, dental problems, side effects of medication, lack of exercise and immobility. The use of laxatives and enema offers some degree of relief but the sufferings and problem tend to persist. Colon hydrotherapy offers an added option to therapy by facilitating the removal of faecal wastes from the entire length of the colon, providing immediate relief as well a long term improvement in the patients. Method: Colon hydrotherapy is carried out using the Toxygen Model BSC UV colon hydrotherapy instrument. It is designed to introduced water into the colon gently and safely. Water is introduced to flush the entire length of the colon. Flushing action is facilitated by gentle abdominal massage to loosen stagnated waste which is then carried out of the colon (solids and gas) with the discharging water. A series of 22 elderly patients with a history of chronic constipation (without organic causes) were treated with colon hydrotherapy. Their response were evaluated at the end of a series of colon hydrotherapy sessions ranging from between 4 to 10 sessions over a period of 4 weeks. Results: In the majority of patients, there was significant improvement in symptoms, reduced level discomfort, reduced use of laxatives and need for enema, and improved feeling of relief.

[38] Hospital Admissions for Influenza-like Illness: Who is at Risk?

V. Menec (Department of Community Health Sciences, University of Manitoba, Winnipeg, Canada)

PURPOSE: Influenza-like illnesses place considerable pressure on the hospital system during the winter months (Menec et al, 1998). This study examined characteristics of patients hospitalized for influenza-like illnesses. METHOD: Administrative data were used to identify admissions to all Winnipeg acute care hospitals during the winter months of 1995-96 to 1998-99. Influenza-like illnesses (ILI) were defined based on ICD-9-CM codes as influenza, pneumonia, and acute and chronic respiratory diseases, such as chronic bronchitis and asthma. RESULTS: Seniors aged 65+ constituted the majority of adult admissions for ILI in all four study years (69.9% to 75.5%). The percentage of 75+ year olds was particularly large and increased steadily over the four years (42.6% to 52.8% of all adult admissions). In comparison, the percentage of 65+ year olds admitted for reasons other than ILI ranged from 55% to 55.5%, with the percentage of 75+ year olds remaining relatively constant over the four years (32.8% to 35.5%). Further analysis indicated that among individuals aged 65+ years old, admission rates for ILI (age and sex standardized) were considerably higher for seniors living in senior apartments than their counterparts living at home. Compared to individuals in senior apartments, admission rates were only slightly higher among personal care home residents in 1997-98 and 1998-99 and, indeed, were lower in 1995-96 and 1996-97. CONCLUSION: Given that influenza vaccination is effective in decreasing hospitalization for influenza-like illnesses among seniors, influenza vaccination programs should be further expanded. Particular emphasis should be placed on targeting individuals living in senior apartments.

[39] Serum albumin and outcomes in patients with fractures on a geriatric rehabilitation unit (GRU)

Serrano MP, Tena-Dávila MC. Unidad Geriátrica Municipal. Área de Sanidad. Ayuntamiento de Madrid. SPAIN

PURPOSE: To analyse predictive value of serum albumin in patients admitted to the GRU with fractures, and the influence of that parameter on the results. METHOD: The study covered 265 patients, 42 male and 223 female, with an average age of 81.38. Serum albumin was determined at admission and related to physical and mental disabilities recorded previously, on admission and on release, measured by Barthel and the Red Cross scale. They were also related to the average stay and complications that required transfer to the hospital for acute patients. The statistical analysis was performed using SPSS RESULTS: Mean albumin was 3.43 mg/dl, 148 (55.8%) patients had albumin level lower than 3.5 mg/dl and albumin was associated with other variables: People transferred to the acute patients hospital (average 3.1, p=0.008), Functional failures (average 3.27) vs Good functional outcome (average 3.47)(p=0.003). The average stay was related with albumin level (r=-0.212, p=0.002). CONCLUSIONS: In patients where albumin levels were low more time was required to achieve functional recuperation and there were more instances of transfer for intercurrent disorders.

[40] Intensive Geriatric Rehabilitation in Demented Pattients with Hip Fracture: Functional Outcomes and Length of Stay

Ranieri P, Guerini F, Pea S, Gatti S, Franzoni S, Rozzini, R, Trabucchi M. GERU, H. P. Richiedei, Gussago, (and Geriatric Research Group, via Romanino 1, 25121 Brescia.)

Aims: To evaluate the effect of intensive geriatric rehabilitation on functional recovery and length of stay (LOS) in demented patients with hip fracture. Subjects: 70 hip fractured elderly patients (mean age 81.7±7.8 years, 88 0.000000emale, 8.30f all new admission) consecutively admitted to Geriatric Evaluation and Rehabilitation Unit over a period of one year. Twenty-six (37.7%) patients had severe cognitive impairment

APPENDIX 13

PARIS, 15-20 JUILLET 2001

XVIIE CONFÉRENCE MONDIALE
DE PROMOTION DE LA SANTÉ
ET D'ÉDUCATION POUR LA SANTÉ

XVIITH WORLD CONFERENCE
ON HEALTH PROMOTION
AND HEALTH EDUCATION

XVII[A] CONFERENCIA MUNDIAL
DE PROMOCIÓN DE LA SALUD
Y EDUCACIÓN PARA LA SALUD

CFES
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26 de abril de 2001

Melba Sánchez-Ayendez
Escuela de Salud Pública
Bernardo 1 Urbanización Monte Alvernia-
00967 Guayanabo
Puerto Rico-Puerto-Rico

Estimado Señora, Señor:

Como ya fue informado, su résumen de comunicación titulado **"Obstáculos con el cumplimiento de las mamografias entre mujeres de edad mediana de bajos ingresos en Puerto Rico"** ha sido aceptado para ser presentado a la XVIIa Conferencia Mundial de Promoción de la Salud y de Educación para la Salud, la Conferencia del cincuentenario de la Unión Internacional de Promoción de la Salud y Educación para la Salud, en Paris, Francia, del 15 de julio al 20 de julio de 2001.

El Comité Cientifico Internacional de la Conferencia ha asignado su resumen en una sesión de comunicación oral titulada **Patient education.** Esta sesión se desarrollará el **16/07/01 11:00:00.** Tendrá un maximo de 12 minutos para presentar su comunicación. Luego, tendrá tiempo al final de la sesión para discusión e intercambio. El idioma de su presentación es español entonces las comunicaciónes tienen que ser preparadas en este idioma.

Le rogamos que note las instrucciones siguientes:

1. Si lo desea, Usted tendrá la posibilidad de apoyar su presentación con transparencias. Los proyectores de diapositivas y de video no son disponibles para las sesiones de comunicaciones orales.
2. Los transparentes tendrán que leerse con la luz de las salas ya que no se bajará. Esto significa que sus transparentes deben aparecer con fondo claro y letra oscura.
3. Si quiere utilizar un programa informático para presentar su comunicación (por ejemplo Power Point) no use los letras menos de 28 puntos.
4. Tiene que preparar su presentación para una duración de 10 minutos guardandose así un tiempo suplementario de 2 mn por si acaso lo necesitará. Los presidentes de sesión tendrán como instrucciones de parar de inmediato todas las personas que irián más allá de 12 minutos. Se trata de una necesidad absoluta por consideración a los otros presentadores y participantes.
5. Tiene que ser delante de la sala asignada al menos 15mn ántes del comienzo de la sesión para encontrar a los presidentes, ver el equipo...
6. Si usted tiene necesidades particulares que no han sido mencionadas el los puntos1–5 arriba, le ruego me contacte con los detalles (maurice.mittelmark@uib.no, fax: +47 55 59 98 87)

En nombre del Comité Científico, le felicito para su participación en el programa y espero mucho encontrarle en Paris en julio.

Atentamente

Maurice B. Mittelmark

Maurice Mittelmark
Présidente

CFES

PARIS, 15-20 JULIO 2001

XVII^A CONFERENCIA MUNDIAL DE PROMOCIÓN DE LA SALUD Y EDUCACIÓN PARA LA SALUD

Programa

INTERNATIONAL UNION FOR HEALTH PROMOTION AND EDUCATION
UNION INTERNATIONALE DE PROMOTION DE LA SANTÉ ET D'ÉDUCATION POUR LA SANTÉ

CFES
Comité français d'éducation pour la santé
www.cfes.sante.fr

11h00

- **Knowledge, attitude, beliefs and practices on sexuality and reproductive health of adolescents in slums of Ahmedabad** *Patel PT (India)*, Capoor IH (India)*

Presentar pruebas de la eficacia de la promoción de la salud **S77**

Presidente: MacDonald G (Reino Unido), Pettersson B (Suecia) *Sala:* 342B - inglés

- **Learning and knowledge-production for public health: a review of options** *Eriksson CCG (Suecia)*
- **Best conditions to improve the quality of expertise evaluation / Enjeux et conditions d'une amélioration de la qualité de l'évaluation d'expertise** *Lafontaine C (Bélgica)*, Vandoorne C (Bélgica), Demarteau M (Bélgica)*
- **The role of evidence in decision/policy-making. A case study. Children's policy in Canada** *McMurtry RY (Canadá), Watson-Wright W (Canadá)*.*
- **Risk prevention linked to youth sexuality: a synthesis of the literature / La prévention des risques liés à la sexualité chez les jeunes: une synthèse de la littérature** *Paicheler G (Francia)**

Salud de la población masculina **S87**

Presidente: Moodie R (Australia), Fennell R (EE. UU.) *Sala:* 336 - inglés

- **The NPI of fathers at risk and early intervention** *Ueda R (Japón)*, Shirakawa SM (Japón)*
- **Young men, identity & relationships: an Irish perspective** *McElearney A (Reino Unido)*, Whittington DA (Reino Unido)*
- **Men's health: a salutogenic perspective / La santé des hommes : une perspective salutogénique** *MacDonald J (Australia)*, McDermott D (Australia), Woods M (Australia), Brown A (Australia), Sliwka G (Australia)*
- **Fatherhood: men and reproduction / Paternidad: hombres y reproducción** *Ayala G (México)*
- **Promoting healthy policies: an example of a project promoting the involvement of fathers in Québec / Promouvoir des politiques favorables à la santé: l'exemple d'un projet de promotion de l'engagement paternel au Québec** *Forget G (Canadá)*, Ouellet F (Canadá), Laverdure J (Canadá), Bouchard C (Canadá)*

Controlar la salud, encuestas de salud, epidemiología **S94**

Presidente: Meyrick J (Reino Unido), Goezeling-Vantal C (Países Bajos) *Sala:* 320 & 321 - inglés

- **Social inequalities of courses of study in Belgium / Inégalités sociales des filières d'enseignement en Belgique** *Parent FM (Bélgica)*, Berghmans L (Bélgica), Coppieters Y (Bélgica), Levêque AM (Bélgica), Godin I (Bélgica)*
- **Consent guidelines for anonymous adolescent health survey research** *Olds RS (EE. UU.)*
- **Health behaviour of school children in Belgrade** *Cucic VS (Yugoslavia)*, Bjegovic VM (Yugoslavia)*, Vukovic DS (Yugoslavia), Grbic D (Yugoslavia)*
- **Health behaviour among 11-15 year old adolescents in Baltic states in 1994 and 1998** *Kepler K (Estonia)*, Maser M (Estonia)*

Nutrición **S30**

Presidente: Simons-Morton D (EE. UU.), Harris E (Australia) *Sala:* 304 & 305 - inglés

- **The Mount Druitt food project - a diet of social capital** *Riches D (Australia)*
- **Lunchbox program: evaluation guiding program development, not prescribing it** *Clifford H (Australia), Rowe FN (Australia)**
- **Nutritional and physical activity needs of children: perception or reality?** *Hsu-Hage B (Australia)*, Love K (Australia)*
- **Newcastle health action zone community food initiative** *Levi C (Reino Unido)*, Murtagh MJ (Reino Unido), White M (Reino Unido)*
- **Supporting state primary school pupils' empowerment through a project in nutrition education** *Chedzoy MEW (Brasil)*, Albuquerque NM (Brasil)*

Educación del paciente **S53**

Presidente: Chapela C (México), Castro JM (México) *Sala:* 328 - español

- **Educación para la salud en un contexto bioético** *Arratia-Figueroa A (Chile)*, Gonzalez-Rodriguez R (Chile), Masalan-Apip P (Chile), Navarro-Tapia ES*
- **La construcción de la subjectividad en los servicios de salud : de la sujeción a la autonomía solidaria** *Wendhausen ÁLP (Brasil)*, Caponi S (Brasil)*
- **Obstáculos con el cumplimiento de las mamografias entre mujeres de edad mediana de bajos ingresos en Puerto Rico** *Sánchez-Ayendez M (Puerto Rico)*, Dávila AL (Puerto Rico), Bustillo MM (Puerto Rico), Larruiz M (Puerto Rico), Martinez G (Puerto Rico), Figueroa N (Puerto Rico), Nazario CM (Puerto Rico)*
- **Menarquia y menopausia, desde una perspectiva de mujeres** *Riquelme-Pereira NB (Chile)*, Valenzuela-Suazo SV (Chile), Alvarado OS (Chile)*

Pobreza **S19**

Presidente: Choukroun O (Francia), Pissarro B (Francia) *Sala:* 352A - francés

- **Agir solidairement pour le mieux-être des collectivités** *Laurence P (Canadá)*, Morel M (Canadá)*
- **Vivre au quotidien un partenariat** *Vaugoyeau MJT (Francia)*, Hyvernat G (Francia)*
- **Education pour la santé et pauvreté : 12 ans de trop** *Tuleu F (Francia)*
- **La conflictualité d'exister et le développement des compétences psycho-sociales dans les ateliers d'éducation pour la santé** *Larrose B (Francia)*
- **Logements sociaux : un lieu de vie** *Puyo M (Francia)*

Atención primaria de salud **S155**

Presidente: Luwaga L (Uganda), Pradhananga Y (Nepal) *Sala:* 329 - inglés

- **Gap taxonomy, frameworks and models of primary health care - a multicultural health perspective** *Tang KC (Australia)*
- **Institutional influences on partnerships in the primary health care sector** *Walker R (Australia)*
- **Transforming primary health care in Brasil : from a medical model to health promotion** *Besserman MV (Brasil)*, Fonseca AS (Brasil), Sutmoller F (Brasil), O'Dhyer-De-Oliveira G (Brasil), Dorighetto-Borges E (Brasil), Hills MD (Canadá)*
- **Health promotion and primary health care** *Avaliani N (EE. UU.)*, Revaz T (EE. UU.)*
- **Self-reported determinants of health service use by French adolescents** *Pommier J (Francia)*, Billot L (Francia)*

11h00

Formación profesional **S98**

Presidente: Hills MD (Canadá), Davies J (Reino Unido) *Sala:* 361 - inglés

- **Training for empowerment in welfare state organisations** *Hauge HA (Noruega)*, Ausland LH (Noruega)*
- **Fostering effective health promotion with effective adult education** *Feather J (Canadá), Moore MA (Canadá)*, Berkowitz M (Canadá), Bell-Woodard G (Canadá)*
- **Review of competencies for Australian health promotion professionals** *Shilton TR (Australia)*, James R (Australia), Howat PA (Australia), Lower TG (Australia)*
- **Students' and their teachers' experiences of a problem-based learning method in Finland** *Poskiparta M (Finlandia)*, Liimatainen L (Finlandia), Sjögren A (Finlandia)*
- **Training in health promotion planning and community partnership** *De-Vogli R (Italia)*

Seguridad / prevención de accidentes **S134**

Presidente: Janvrin MP (Francia), Guilbert P (Francia) *Sala:* 362 - francés

- **Port de la ceinture de sécurité chez les jeunes et inégalités sociales en Belgique** *Levêque AM (Bélgica)*, Lagasse R (Bélgica), Humblet PC (Bélgica)*
- **Premiers secours en milieu de travail : adaptation et application du modèle McGill** *Fontaine G (Canadá)*
- **Promouvoir les dispositifs de retenue pour enfants par le partenariat** *Schusselé-Filliettaz S (Suiza)*, Burnier MJ (Suiza), O'Neill M (Canadá)*
- **Soigner les effets du trauma en situation transculturelle** *Baubet T (Francia), Moro MR (Francia)*, Serre G (Francia), Ngaba D (Francia)*
- **Prise de conscience du risque professionnel chez les jeunes** *Coppieters Y (Bélgica), Kohn L (Bélgica), Piette D (Bélgica),*

Tabaco **S163**

Presidente: Oddoux K (Francia), Melihan-Cheinin P (Francia) *Sala:* 333 - francés

- **Effets d'une formation continue en "counselling" tabagique sur la pratique préventive des médecins** *Sauvageau L (Canadá)*, Turbide G (Canadá), Gosselin C (Canadá), Champagne M (Canadá), Bélanger A (Canadá), Viel C (Canadá)*
- **Naissance d'un partenariat : l'alchimie des quatre éléments** *Saretto S (Francia)*, Legnazzi I (Francia)*
- **Le recensement des ressources de santé : le cas du tabagisme au Québec** *Chabot P (Canadá)*, Potvin L (Canadá), Gauvin L (Canadá), Frolich K (Canadá)*
- **Des médecins actifs pour contrer le tabagisme: un programme d'intervention pour optimiser les pratiques de counselling en cessation tabagique des médecins omnipraticiens de Montreal** *Tremblay M (Canadá)*, Lacroix GA (Canadá), Dery H (Canadá), O'Loughlin C (Canadá), Makni J (Canadá), Meshefedijan V (Canadá)*

Tabaco y entornos **S131**

Presidente: Haglund BJ (Suecia), Anderson P (Países Bajos) *Sala:* 341 - inglés

- **Hospital and social sanitary services without smoke : the project of HPH Veneto region network.** *Tasso S (Italia)*, Favaretti C (Italia), Marcato G (Italia), Brosolo AM (Italia)*
- **Effect of cigarette price increases disadvantaged communities** *Bancr (Reino Unido)*, Parry O (Reino Unido)*
- **The effectiveness of tobacco cont in Taiwan** *Huang SJ (China)*, Huang*
- **Tobacco policy and practices in h implications for health promotion** *Acosta-Deprez VM (EE. UU.)*, Forouzes Lopez-Zetina J (EE. UU.)*, Friis R (EE. U*
- **European policy conference on sn** *Fleitmann S (Bélgica)*, Beck V (Bélgica*

Enfermedades tropicales

Presidente: de-Juan-Creix I (Uz

- **Hidatidosis problema de todos** *Gi Ugarte R (Uruguay), Orlando D (Urugua*
- **El reuso de las aguas residuales parasitarias en la América Latina** *Rocha A (Brasil)*
- **Capacitación en paludismo en la promoción de la salud** *Bessa-Barr D-Alecrim W (Brasil)*
- **Epidemia de colera, promoción y "teníamos que vivir contradiciéne**

Sesión de traba

Foro mundial para el diálogo sobre la promoción de la salud I

Presidente: Hagard S (Rei

- **Global Forum for health promoti**

Talleres

Envejecimiento

- **Active Ageing: an investment in** *Kalache A*

Actividad física

Presidente: Perrin C

- **Utilisation des activités physiqu cadre de la promotion de la sa**

Formación profesional

Presidente: Arroyo-Acevedo HV (Pu

- **Modelos y prácticas de formaci en promoción de la salud y edu América Latina y el Caribe** *Arro Cardaci DR (México), Sanabria-Ram Faria-Wesphal M (Brasil)*

Formación profesional

- **Professional training, Formati en place par la Commission** *Chamouillet H (Comisión Europea)*

Population

Patient education
Education du patient
Educación del paciente S53

Educación para la salud en un contexto bioético

Arratia-Figueroa A *(Chile)** Gonzalez-Rodriguez R *(Chile)* Masalan-Apip P *(Chile)* Navarro-Tapia ES *(Chile)* *[abstract n° 76]*

La Educación y promoción para la salud en Enfermería, representan una meta primaria y la principal estrategia para ayudar a obtener un comportamiento conducente al autocuidado, tarea que debe ser compartida por todo el equipo profesional. Se espera que ambas, incorporen una dimensión ética que considere la libre voluntad al tomar decisiones en salud, situación que se ha visto afectada, por una progresiva deshumanización, repercutiendo en la integridad y dignidad de las personas. Ultimamente las investigaciones en ética han privilegiado dilemas clínicos, en desmedro de los existentes en la práctica educativa. Para realzar un proceso que respete la dignidad y autonomía se plantea, evaluar la importancia de incorporar conductas profesionales y estrategias que favorezcan la práctica de la bioética en acciones educativas. Los objetivos pretenden identificar: el grado de compromiso por la educación en salud, conductas facilitadoras y/o limitadoras y estrategias educativas empleadas por los profesionales. Se utiliza una metodología descriptiva cualitativa-cuantitativa, por entrevistas semiestructuradas con técnica de análisis de contenido a profesionales y consultantes en consultorios de niveles socioeconómicos medio y bajo, en Santiago-Chile. Se concluye que la educación carece de principios bioéticos, especialmente el respeto por la autonomía. El contexto sociocultural bajo, muestra factores limitantes en la aplicación de estrategias educativas. Las opiniones de consultantes coinciden en que existe un ambiente desmotivador respecto a la educación, aumentando la permanencia de conductas pasivas y aceptación, afectando directamente la autonomía. Los profesionales mantienen, sin diferencias, conductas paternalistas llevando a no individualizar la atención y desconsiderando la opinión del otro. No existe conciencia del respeto por el consentimiento informado al educar, manteniendo estrategias tradicionales que impiden la participación. Otros factores limitantes corresponden a la falta de tiempo para la atención y políticas institucionales que desfavorecen un compromiso de equipo, prevaleciendo intentos aislados que dadas las condiciones terminan por extinguirse.

La construcción de la subjectividad en los servicios de salud : de la sujeción a la autonomía solidaria

Wendhausen ÁLP *(Brasil)** Caponi S *(Brasil)* *[abstract n° 147]*

La búsqueda de Promoción de la Salud, depende entre otras condiciones, la de incorporar la participación en la salud, con consecuente empoderamiento de los sujetos y comunidades. Tal práctica implica en la (re)distribución de poderes, lo que choca con las estructuras y relaciones antidemocráticas de nuestro cotidiano. Este estudio se propone a reflejar sobre las condiciones que llevan a la construcción de una subjetividad sometida, con reflejos para las prácticas de salud, en nivel individual y colectivo. Para tanto, inicialmente mostramos los efectos de los poderes y saberes médicos en las relaciones entre instituciones/profesionales/usuarios, de modo que la subjetividad tanto de profesionales como de usuarios queda sometida a la lógica de una medicalización creciente de la existencia. De este modo, la asistencia a la salud acaba sirviendo como instrumento de ingeniería social, a través de la "normalización" a la clientela de acuerdo con los intereses capitalistas. El modo disciplinar con que son tratados los clientes se impone de tal modo a sus cuerpos y consciencia, que pasan a creer que el cuidado con la salud están fuera de su cuerpo y voluntad. Tal representación interfiere tanto en la relación más individual con los profesionales de salud, especialmente el médico y acaba por estenderse para el nivel colectivo, en el ámbito de las decisiones políticas en el área de la salud en las cuales se sienten aún menos capaces de intervenir. Intentando revertir esta situación de heteronomía, proponemos una vuelta a una ética que busque el compromiso y la acción individual (autonomía) sin desvincularse de los intereses colectivos. Tal postura nos remite a establecer una relación sólida con nosotros mismos, oponiéndonos al fascismo cotidiano de las relaciones en el área de la salud, impidiendo la renuncia a las escojas personales y por lo tando, la fijación de las relaciones de poder.

Obstáculos con el cumplimiento de las mamografias entre mujeres de edad mediana de bajos ingresos en Puerto Rico

Sánchez-Ayendez M *(Puerto-Rico)** Dávila AL *(Puerto-Rico)* Bustillo MM *(Puerto-Rico)* Larruiz M *(Puerto-Rico)* Martinez G *(Puerto-Rico)* Figueroa N *(Puerto-Rico)* Nazario CM *(Puerto-Rico)* *[abstract n° 670]*

Aún cuando la evidencia de la mamografia como método de cernimiento de cáncer de mama es notoria y éstas han aumentado en los últimos años el cumplimiento con las órdenes de mamogramas entre mujeres mayores de 50 años es deficiente. Este cartel presenta la primera etapa de un proyecto de tres años que contempla estudiar el cumplimiento de las mujeres de edad mediana de bajos ingresos en Puerto Rico respecto de las guías de cernimiento de cáncer de mama por medios de mamografias establecidas por los Institutos nacionales de salud de los Estados Unidos en 1997. En esta primera parte del proyecto se llevaron a cabo grupos focales con el fin de obtener la información pertinente para desarrollar los instrumentos necesarios para la investigación. Mujeres de diferentes zonas geográficas de Puerto Rico que acuden los centros de salud comunitarios participaron en estos sesiones. Los resultados obtenidos apuntan a que las mujeres perciben el cáncer como un desorden de células y que el dolor y la incomodidad son factores asociados a esta enfermedad. Las mujeres tienen algún conocimiento del autoexamen de mama, el examen clinico y la mamografia como métodos para detectar el cáncer de mama. También sabían de la superioridad de la mamografia como método de detección temprana. No mostraron tener una nocíon clara de las guías de cernimiento Institutos nacionales de salud de los Estados Unidos en 1997. En la discusión salió a reducir el miedo al diagnóstico y la incomodidad con la prueba como las barreras principales para cumplir con los referidos de las pruebas. Otros elementos importantes al respecto son : el costo, los problemas de transporación, la relación médico-paciente y los conflictos con el deber de cuidar a los niños. Estos grupos focales fueron muy útiles en traer a la luz aspectos importante con el cumplimiento de las ordenes además de aclarar el vocabulario para el desarrollo de los cuestionarios que contestarán 200 mujeres en las etapas próximas del proyecto.

Menarquia y menopausia, desde una perspectiva de mujeres

Riquelme-Pereira NB *(Chile)** Valenzuela-Suazo SV *(Chile)* Alvarado OS *(Chile)* *[abstract n° 926]*

La bioetica surge en una epoca de crisis de conciencia en la comunidad científica, para constituirse luego en un marco de reencuentro de las ciencias biológicas con la filosofía. Ella tiene como principio general la defensa de la dignidad humana, procurando humanizar de una forma especial el ambiente de las clínicas y hospitales, y promover los derechos del paciente o usuario para ejercer una sana libertad. El presente trabajo estudia esencialmente el principio de autonomía, definido como la capacidad de autogobernarse, escoger y evaluar sin restricciones, así tambien, como un valor a conquistar y que promueve cambios radicales en la relación profesional de la salud y usuario. El objetivo de este estudio fue que los enfermeros-docentes de cirugía de dos escuelas de enfermería (Chile - Brasil) describiesen cómo percibían la autonomía del paciente dentro del servicio de cirugía. Se realizó a cada enfermera una entrevista personal en la cual se dio una pregunta orientadora al respecto, intentando alcanzar un acercamiento de tipo experiencial con el fin de sistematizar la visión de enfermeras chilenas y brasileñas relacionado al tema. Analizados los dicursos de las profesionales se observó que el estilo de trabajo en los servicios quirúrgicos no permite el ejercicio de la autonomía del paciente, donde el acceso a la información es escasa, a pesar de su condición de esencial para poder optar a diferentes alternativas en la toma de decisiones de manera autónoma. La mayoría de las enfermeras describen ausencia de autonomía en los pacien-