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Hormone Replacement Therapy: Investigating Language Barriers

Mark Gamber, BA, BS; Muriel Marshall, DO, DrPH; Gilbert Ramirez, DrPH; Janice Knebl, DO; Karen Godwin, PhD; Hector Balcazar, PhD; Craig Whiting, DO

Objective: To investigate the relationship between the language spoken (Spanish or English) by the Hispanic patient when talking to their doctor and the patient's use of HRT.

Design: Retrospective chart review.

Setting: Northside Family Practice clinic, UNTHSC in Ft. Worth, Texas.

Participants: 102 postmenopausal Hispanic women.

Measurement: HRT use, Spanish or English speaking, natural or surgical menopause.

Results: A total of 102 postmenopausal Hispanic females met the inclusion criteria for chart review. The mean age of English speakers is 66.7 years old. The mean age of the Spanish speakers is 64.93 years old. 54% (55) spoke Spanish at their clinic visit and 46% (47) spoke English. Of the 55 Spanish speakers, 36% had at some point used HRT while 64% had never used HRT. Of the 47 English speakers, 49% had at some point used HRT while 51% had never used HRT. There is not a significant difference ($p = 0.20$) when comparing language spoken by the patient at the clinic visit and whether they are prescribed HRT.

Conclusion: While a significant difference was not found between the two groups, a greater percentage of English speaking (49%) than Spanish speaking (36%) Hispanic females are prescribed HRT in this study. In fact, when adjusted for age, English speakers were 1.88 times more likely to have used HRT than Spanish speakers. Based on the apparent need to bridge the language barrier between physicians and patients over issues important as menopause and HRT, more research is needed in this area.

Key Words: Hormone Replacement Therapy, Hispanic, Women

University of North Texas Health Science Center; Ft. Worth, Texas (MG, MM, GR, JK, KG, HB, CW)

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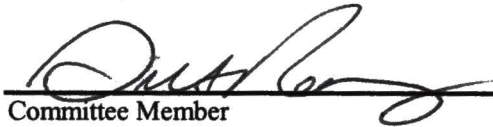
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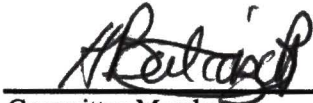
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HORMONE REPLACEMENT THERAPY: INVESTIGATING LANGUAGE BARRIERS

THESIS

Presented to the School of Public Health

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Master of Public Health

By

Mark A. Gamber, B.A., B.S.

Fort Worth, Texas

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Editor
Ethnicity & Disease, ISHIB
2045 Manchester Street, NE
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Dear Sir/Madam,

Enclosed you will find the original manuscript "*Hormone Replacement Therapy: Investigating Language Barriers*" and an electronic file on disk for review and possible publication in *Ethnicity & Disease*. The information contained within the article is consistent with past submissions published in your journal and the topic area of our manuscript has yet to be explored.

Authors include Mark Gamber, BA, BS; Muriel Marshall, DO, DrPH; Gilbert Ramirez, DrPH; Janice Knebl, DO; Karen Godwin, PhD; Hector Balcazar, PhD; Craig Whiting, DO

My contact information is at the top of the page and I will be responsible for correspondence with the editors of *Ethnicity & Disease*. I am a fourth year student pursuing the dual degree of Doctor of Osteopathic Medicine (D.O.) and Masters in Public Health (M.P.H.). I can be contacted at the above address until May 31, 2002. After May 31st, 2002, please send correspondence to my major professor whom I will be in frequent contact with. Her address is:

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Thank you for consideration of our manuscript. Please do not hesitate to contact us with any questions, comments or concerns. We hope this manuscript meets the expectations of your publication.

Sincerely,

Mark Gamber

Introduction

Thirty million Hispanic Americans live in the United States. Mexican Americans, 62.3% of all Hispanics, comprise the fastest growing minority group.¹ Some are first generation; others have lived here for more than one generation. The latter group is usually more acculturated to the American lifestyle. Studies have shown that less acculturated women consume more protein, carbohydrates, vitamins, and calcium.^{2,3,4} The decrease in calcium intake as women become more acculturated could be a contributing factor to the findings of recent hip fracture studies. In 1988, one study indicated that Anglo women had a 2-fold greater incidence rate of hip fractures than Hispanics.⁵ Ten years later, the gap between these two cohorts appears to be closing for women 65 and older. A 1998 study found the incidence rate of hip fracture in Anglo women only 1.4 times that of Hispanics.⁶ It might be that Hispanic women are becoming more prone to hip fracture. First generation Mexican American women consume 779 mg of calcium daily (70% RDA). Second generation women consume 645 mg daily (57% RDA)—an amount less than Anglo women who ingest an average of 678 mg daily (61% RDA) and who are known to be predisposed to hip fracture.³ A related study has shown that Mexican American girls are more likely to ingest inadequate amounts of Vitamin D and calcium than males or cohorts of other ethnic groups.⁴ The nutritional trends provide one explanation for the increasing hip fracture incidence.

HRT is one option for the prevention osteoporosis. Deciding whether to use HRT is a difficult choice since HRT has both risks and benefits. Many older case-control studies have shown HRT also reduces the risk of coronary artery disease (CAD). However, the more recent randomized Heart & Estrogen /Progestin Replacement Study showed that HRT was not effective for secondary prevention of coronary heart disease in postmenopausal women.⁷ More American women die each year from heart disease than from any other cause.⁸ CAD kills approximately 233,000 women annually.⁸ Osteoporosis leads to 1.5 million fractures in postmenopausal women in the United States alone.⁹ Two major risks of HRT, however, are the development of breast cancer with long term use, and of endometrial cancer with unopposed HRT use. Health care providers play a pivotal role in advising patients about HRT use.¹⁰ A few studies have cited lack of physician counseling as one of the reasons for low HRT use.^{11,12}

Only a few studies have looked at HRT use among minority women, (especially Hispanics), and they report a lower frequency of HRT use among minority women compared to White women.^{10,13-15} A

previous pilot study by the investigator indicates that Hispanic women are less informed on the issues of osteoporosis and hormone replacement therapy than the general population of women in the United States.¹⁶ Furthermore, while there were an equal number of English and Spanish speakers in the survey population, the Spanish speakers were less likely to be on HRT.¹⁶

Previous subject interviews by the investigator indicate that some of the details of the patient interview are missed if the conversation is translated back and forth between two languages. Menopausal symptoms tend to be more vague than for example a sore throat or a broken bone and these subtleties could be missed in an interview challenged by the language barrier. The growing cohort of Hispanic women creates a challenge to the health care system. The increasing incidence of hip fractures supports a need to define effective ways of communication.

Methods

Included in this retrospective chart review were active patients of the Northside Family Practice Clinic of the University of North Texas Health Science Center at Ft. Worth who are female, Hispanic, and naturally (not surgically) postmenopausal. Charts with female first names, Hispanic last names, and birthdates indicating they were likely to be peri or postmenopausal were drawn from the clinic chart room. Chronic condition flow sheets within patient's charts were studied to determine if the patient was menopausal and if the cause was natural or surgical. For those patients who had natural menopause, the medication flow sheets within the patient's chart were studied to ascertain whether the patient had used hormone replacement therapy (HRT). Next, the language indicator on the outer cover of the patient's chart was recorded as English or Spanish. Finally, use of HRT for natural menopause was compared in Spanish and English speaking Hispanic women.

Statistical analyses were carried out with SPSS, version 10 (SPSS Inc, Chicago, IL). Chi square and logistic regression were used to analyze the data. Odds ratios and 95% confidence intervals were calculated for selected variables of interest. The UNTHSC Institutional Review Board approved the study.

Results

A total of 102 postmenopausal Hispanic females met the inclusion criteria for chart review. 54% (55) spoke Spanish at their clinic visit and 46% (47) spoke English. The mean age of English speakers is 66.7 years old. The mean age of the Spanish speakers is 64.93 years old. Of the 55 Spanish speakers, 36%

had at some point used HRT while 64% had never used HRT. Of the 47 English speakers, 49% had at some point used HRT while 51% had never used HRT.

<table 1 - language & hrt use>

There is not a significant difference ($p = 0.20$, $OR = 1.68$, $CI = 0.76$ to 3.71) when comparing language spoken by the patient at the clinic visit and whether they are prescribed HRT. Using logistic regression to adjust for effects of age, the p-value is smaller, but there is still not a significant difference ($p = 0.13$, $OR = 1.88$, $CI = 0.83$ to 4.29). The age difference (Spanish speakers mean age 64.93 years & English speakers mean age 66.7 years) is significant ($p = 0.03$).

Discussion

While a significant difference was not found between the two groups, a greater percentage of English speaking (49%) than Spanish speaking (36%) Hispanic females are prescribed HRT in this study. In fact, when adjusted for age, English speakers were 1.88 times more likely to have used HRT than Spanish speakers. This non-significance appears to be due to a lack of study power.

This is a pilot study. A few changes could be made to strengthen future studies. The first improvement would be to set a minimum number of visits by the patient, maybe 3 or 4, as one of the inclusion criteria. First and second visits tend to be for acute problems and follow up. It is only after the trust building process is initiated that tertiary health issues such as hot flashes and mood swings tend to be discussed.

The inclusion criteria for age should be tightened. The average age of menopause is 51. There is a window of opportunity around this age to use HRT to prevent menopausal symptoms and osteoporosis. An 85 year old woman is probably not affected by hot flashes and prescribing her HRT will no longer prevent osteoporosis. Therefore, it would be reasonable to consider a maximum age when defining inclusion criteria.

Not only should the number of charts reviewed be increased to raise the power, but also the study should be repeated as a multiclinic chart review. The results border on significance and the health implications for Hispanic women are great. The challenge will be finding clinics that keep accurate data on the language spoken by the patient.

Furthermore, the Spanish fluency of physicians, nursing staff, and students will need to be controlled. At the UNTHSC clinic where the study took place, the entire nursing staff, one of the physicians, and some of the students are fluent in Spanish. Thus, in a less bilingual clinic, the HRT prescribing practices may differ towards greater significance.

Based on the apparent need to bridge the language barrier between physicians and patients over issues important as menopause and HRT, more research is needed in this area.

Acknowledgments

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Table 1

Language & HRT Use

	Spanish	English	Total
HRT	20	23	43
No HRT	35	24	59
Total	55	47	102

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