The aims of this study were to develop and administer a questionnaire to Hispanic and non-Hispanic white women (control group) that assessed and compared patient understanding of genetic counseling information. We also wanted to identify factors that affected understanding. The questionnaire consisted of collecting demographic factors and four areas of assessment: knowledge, risk comprehension and specific format understanding, belief systems, and interpretation of commonly used metaphors. We hypothesized that Hispanic women differ in understanding of genetic counseling information as compared to non-Hispanic white women.

A total of 107 questionnaires were collected, 56 questionnaires from Hispanic women and 51 from non-Hispanic white women. Overall, Hispanics did not demonstrate equal understanding of the information compared to Caucasians. There were significant differences in scores between Hispanic and non-Hispanic white women in the following areas: total questionnaire, knowledge section, risk section, and beliefs. Metaphor answers were not determined to be significantly different between ethnic groups. Thus metaphors were generally understood. Risk understanding was the least understood topic of genetic counseling by Hispanics and non-Hispanics white women. Remarkably, percents were the least understood by both ethnic populations suggesting percentages may not be the best format for depicting risk. Additionally, qualitative words were best understood by non-Hispanic white women, but least understood by Hispanic women, implying a
significant difference in understanding for risk format. Risk understanding by format was
determined to be fractions, odds, pictures, words, and percents for the whole study
population in this order. Risk presentation format for Hispanic patients was ascertained to
be fraction, pictures, odds, percents, and words in this order.

Our study shows that ethnicity and demographic factors associated with ethnicity
influences understanding of genetic counseling and play an important role during the
counseling session. Most research regarding genetic counseling has traditionally involved
non-Hispanic white populations, excluding culturally diverse groups of patients.
Awareness and knowledge of differences might give the genetic counselor insight into
the effect of culture on the success of genetic counseling and allow the counselor to
acquire and implement various, more effective, culturally appropriate counseling
techniques.