

**Title:** Pap Smear Utilization Survey Through Partnership of Academic, Professional, and Lay Health Workers

**Program of Study:** Public Health

**Presentation Type:** Print Poster

**Mentor(s) and Mentor Email:** Dr. Bethesda O'Connell (boconnell@liberty.edu)

**Student name(s) and email(s):** Olushola Ogunleye (ooogunleye@liberty.edu)

**Category:** Applied

**Abstract:** Cervical cancer is the second most common cancer among women in the developing world, including Latin America, with an estimated 445,000 new cases in 2012 (84% of the global incidence) and 10 to 35 deaths per 100,000 women. Annual mortality in Nicaragua is 6 times the U.S. rate. This may be explained by the lack of effective screening programs, especially involving cervical cytologic testing (the Papanicolaou test). Even when such screening services exist, there is often poor utilization. A researcher from Liberty University, faculty and students from East Tennessee State University, and the Center for Development in Central America formed a partnership to conduct projects to benefit the community of Nueva Vida, Nicaragua. To promote a new free Pap smear program provided by the clinic, a community-wide, door-to-door, survey was conducted by students and local health promoters regarding Pap smear utilization. Of 1,117 women aged 14 years to 95 years, 78.4% reported ever having had a Pap smear. Of those who had ever had a Pap, 78.9% reported a normal result, while 10% reported an abnormal result and 11.1% had not received their results. The most common reasons for not having a Pap smear

were fear, and pain. There was statistically significant evidence ( $p=0.000$ ) to show that there was a difference in proportions of women who ever had a Pap smear by *etapa* (neighborhood), with the proportions per *etapa* highest in Trinidad Central (97.8%) and lowest in *Etapa* 4 (72.0%). Contrary to findings from other studies in Latin America and other developing countries, there was a moderately high Pap smear utilization rate in the community. Additional information that would have been helpful included date of last Pap, where they received the Pap, and type of follow-up received. The survey provided previously unavailable information on the population served. In addition, preliminary data for grant applications to expand the clinic's Pap smear program was obtained.

**Christian Worldview:** This research was developed as a partnership with a faith-based organization in Nicaragua – the Center for Development in Central America. The partnership was conceived from a desire to reach out to the people of Nicaragua, who have one of the highest rates of cervical cancer worldwide. Preliminary data showed that the awareness and utilization rates of Pap smear in Nicaragua were low, which was associated with the high cervical cancer rates. The religious and cultural atmosphere in Nicaragua and most of Latin America is often resistant to advocacy for contraception and some other aspects of reproductive health. The public health researchers and the staff of CDCA, in considering the situation, chose to carry out this survey to assess the knowledge and practice of Pap smear testing in the local community where CDCA operates. As Christians, we are commanded to have a heart of compassion, as stated in 1 Peter 3:8 – “Finally, all of you be of one mind, having compassion for one another, love as brothers, be tenderhearted, be courteous.” Compassion was the basis for the outreach to the Nueva Vida community, aiming to acquire data that the CDCA clinic can use to plan its program

as well as introduce the new program of the clinic as a form of intervention for the community. It is hoped that, with increased awareness of the need for Pap smear testing and the provision of free services in the local community, the fears of the women and other barriers to utilization will be eliminated. By this, we show the love of Christ to the women of this community, and by extension to the entire community. Through this intervention, we can create more opportunities for the Gospel of our Lord Jesus Christ to be received and thrive in the community.