Non communicable diseases (NCD) such as cardiovascular disease (CVD) and diabetes are the leading causes of death and disability in many communities world-wide and account for 80% of deaths in low- to middle-income countries (World Health Organization [WHO]; World Statistics 2011; Geneva WHO, 2011). In 2014 (in Ecuador), CVD accounted for 25% of all deaths (all ages, both sexes) followed by cancers, chronic respiratory diseases, and diabetes [17%, 4%, and 4%] (WHO, 2014).

**THEORETICAL FRAMEWORK**

Nola Pender’s (Health Promotion Model, HPM, Pender et al., 2011), provides an adequate framework for identifying and understanding factors that will either enhance or hinder physical activity. According to Pender (personal communication, November 24, 2013), many past studies have shown that perceived barriers, perceived self-efficacy, interpersonal influences, and commitment to a plan of action are among the strongest predictors of health-promoting behavior.

**OBJECTIVE**

Objective of this proposed study is to investigate the sociodemographic determinants and cardiovascular disease (CVD) risk factor knowledge about physical inactivity and high density lipoprotein cholesterol and their potential interrelationships in rural Ecuadorian women 18 years of age and older. Potential moderating effects of employment on physical inactivity will be analyzed.

**BACKGROUND**

Correlative predictive secondary analysis will use selected de-identified data from the (2015) Parent Study entitled: Determinants, health literacy, heart failure risk factors, heart failure self-care knowledge, and heart failure self-care health behaviors and community, to determine if employment has a mediating/moderating effect upon knowledge of physical inactivity as CVD risk factor and moderate/vigorous intensity physical activity. Permission to analyze data from Parent Study requested from Institutional Review Board of Azusa Pacific University and from owner of Parent Study. (IRB Approval #19-562; awaiting Data for Analysis)

**METHODS**

**SAMPLE:** n = 243; The setting for the Parent Study was a medical clinic in Yaruqui, a rural location http://www.citypopulation.info/parish-admin.php?adm2id=170185 in the Pichincha province on mainland Ecuador and at a medical clinic and a neighborhood center in Puerto Baquerizo Moreno on San Cristóbal island of the Galápagos Province, Ecuador, an urban setting.

**INSTRUMENTS:** Data were collected about sociodemographics (age, education, marital status, income, location, and employment) using an investigator developed sociodemographic data sheet. Risk factor knowledge was assessed using an instrument created for a study of patients’ and their significant others’ knowledge about cardiac risk factors and patients’ personal cardiac risk factors, The Cardiac Risk Factors questionnaire (Momtahan, Berkman, Sellick, Kears, & Lauzon, 2004). Physical activity assessment (moderate and vigorous physical activity) and knowledge of own PI as a CVD risk factor was assessed using a pencil and paper version of the American Heart Association’s My Life Check - Life’s Simple 7 (http://www.heart.org/HEARTORG/Conditions/My-Life-Check---Lifes-Simple-7_UCM_471453_Article.jsp#WywPR(X)Tc) online questionnaire. HDL cholesterol determined using a point of care finger-stick and a CardioChek PLUS Professional Blood Analyzer Testing Device (HealthChek Systems, Inc.).

**RESULTS**

Study will add to body of knowledge about CVD risk factors in rural Ecuadorian women. With a significant increase in CVD mortality rates in Ecuador from 2012-2016, and still increasing (Balda, Canizares et al., 2018), additional knowledge about potential determinants is warranted. Physical inactivity is known to contribute to development of CVD. The rate of physical inactivity in urban Ecuadorian females was previously reported to be 29.3% [21.0-37.6] (World Health Organization, 2018). Therefore, this study will add to the knowledge base about CVD prevention in non-urban females and may benefit the development of health care practice, policy, and future research.

**CONCLUSIONS**

Current CVD morbidity and mortality in Ecuador is unsettling, consequently, interventions are needed that will increase CVD risk factor awareness. Current information of how income, age education, marital status, physical inactivity, employment, and knowledge of CVD risk factors associated with HDL in rural Ecuadorian adult women is unknown.

**THEORETICAL IMPLICATIONS**

The HPM depicts how one’s individual characteristics and experiences along with behavior-specific cognition and affect will affect one’s behavioral outcomes; namely, health-promoting behavior. Pender et al. (2011) suggests that “prior behavior is proposed to have both direct and indirect effects on the likelihood of engaging in health-promoting behaviors” (p.45).

**CLINICAL IMPLICATIONS**

The proposed study will add to the existing body of nursing knowledge and benefit the population under study by providing the data needed for the development of future healthcare interventions to improve CVD risk in Ecuadorian women. By extension, the proposed study will benefit other under-represented and under-served populations and communities, to which the results may be extrapolated.