Characteristics of Adult Tobacco Smokers and Their Smoking Cessation Outcomes After An Intervention Program

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Smoking Epidemiology in the United States
- Approximately 40 million smokers.
- 440,000 deaths yearly.
- Approximately 31% of all adults smoke.
- Highest level of prevalence ages 18 to 44.
- Smoking decreases lifespan by 10-15 years.
- National health objective: by 2020 to reduce smokers to 12% or less.

Miami-Dade County, Florida Demographic Risk Factors
- 22% of all Floridians smoke.
- Higher African American population than national, 14.6% to 12.3%.
- Higher Hispanic population than national, 16.8% to 12.5%.
- Cancer second highest cause of death, 22%.

Research Questions
- Research Question 1: Was there a significant change in the participants' self-evaluation of their general health, physical health, emotional health, level of activity, or stage of change immediately pre-intervention and at 12 months post-intervention?
- Research Question 2: If there was a significant change in the participants’ self-evaluation of their general health, physical health, emotional health, level of activity, or stage of change, what were the relative contributions of these post-intervention scores in the prediction of smoking status at 12-month follow-up?

Inclusion Criteria
- Residents of Miami-Dade County, Florida.
- Ages 45 to 49 history of smoking at least one pack of cigarettes a day for 10 years or more; immediate family history of lung cancer (father, mother, brother, sister).
- Ages 50 and over: history of smoking at least one pack of cigarettes a day for 10 years.

Sample
- Primarily low-income participants from mixed racial and ethnic backgrounds.
- Randomly selected from individuals who completed the ELCAP smoking cessation program from inception in 2001 through 2005.
- Total study population from 2001 through 2005: 446.
- Power analysis: desired sample size = 129. With random sample, used 223 total population of 446.

Data Collection and Analysis
- Selection of random sample from existing medical records.
- Comparison to with SPSS 14.0.
- Descriptive statistics for sample characteristics.
- Research Question 1: Paired t tests.
- Research Question 2: Logistic regression analysis.

Research Design
- Retrospective, longitudinal, cross-sectional study.
- Secondary data from two survey instruments.
- Two time periods: (1) at baseline pre-intervention and (2) at 12-month follow-up.

Instrumentation
- ELCAP Intake Survey: Taken at enrollment
- 7 sections, 21 items
- Addresses smoking history, cessation efforts, stage of change, general health, level of activity, physical health, emotional health.
- ELCAP Follow Up Survey: Taken at 12-month follow-up
- 5 sections, 16 items
- Addresses smoking activity past month, stage of change, general health, level of activity, physical health, emotional health.

Results: Smoking Cessation
- Participants were long-term, heavy smokers who had previously tried but been unsuccessful in stopping smoking.
- Pre-intervention, approximately 95% indicated they were seriously thinking of quitting smoking within 30 days to 6 months.
- 12 months post-intervention, this number was essentially unchanged.

Results: Means of the Five Variables Pre- and Post-Intervention

Conclusions and Summary
- ELCAP smoking cessation program was partially effective in decreasing smoking activity from pre-intervention to 12 months post-intervention.
- Program precipitated statistically significant increases in participants’ general and physical health from pre-intervention to 12 months post-intervention.
- None of the five variables, general health, physical health, emotional health, level of activity, or stage of change predicted smoking cessation for this population at 12 months post-intervention.
- ELCAP program partially contributed to participants’ decreased smoking and increased general and physical health from pre-intervention to 12 months post-intervention.
- Such programs can help minority, low-income individuals at risk of smoking-related diseases. Similar programs can be implemented through hospitals, community clinics, and private organizations to help minority, low-income patients lower their risks of smoking-related illnesses and increase their maintenance of smoking cessation.