**SAS 4: Graphing Prevalence**

We are going to work on how to graph annual prevalence rates for the purposes of evaluating and comparing different countries trends. We are going to use the datelines function to input some data from a variety of different sources. This data is fictitious, but at the end of this assignment, you will be asked to collect and aggregate your own data on a disease of your choosing.

DATA HIVDATA ;  
    INPUT Country $ Year $ HIVPrev ;  
DATALINES ;  
    USA 2010 14.7  
    USA 2011 14  
    USA 2012 13.5  
    USA 2013 13  
    Nigeria 2010 410  
    Nigeria 2011 412  
    Nigeria 2012 415  
    Nigeria 2013 420  
RUN ;

Then we are going to craft a line graph to look at all the trends across the different years between these two countries.

PROC SORT  
    DATA=WORK.HIVDATA(KEEP=Year HIVPrev Country)  
    OUT=WORK.SORTTempTableSorted  
    ;  
    BY Year;  
RUN;  
SYMBOL1  
    INTERPOL=JOIN  
    HEIGHT=10pt  
    VALUE=NONE  
    LINE=1  
    WIDTH=2  
   
    CV = \_STYLE\_  
;  
SYMBOL2  
    INTERPOL=JOIN  
    HEIGHT=10pt  
    VALUE=NONE  
    LINE=1  
    WIDTH=2  
   
    CV = \_STYLE\_  
;  
Legend1  
    FRAME  
    ;  
Axis1  
    STYLE=1  
    WIDTH=1  
    MINOR=NONE  
   
;  
Axis2  
    STYLE=1  
    WIDTH=1  
    MINOR=NONE  
   
   
;  
TITLE;  
TITLE1 "HIV Prevalence per 100,000 Population as reported by WHO, 2010 - 2013";  
FOOTNOTE;  
FOOTNOTE1 "APA Reference Should go Here";  
PROC GPLOT DATA = WORK.SORTTempTableSorted  
;  
PLOT HIVPrev \* Year      =Country  
 /  
     VAXIS=AXIS1  
   
    HAXIS=AXIS2  
   
FRAME    LEGEND=LEGEND1  
;  
RUN;

1. Screen shot your results and input them into a word document.

2. You are going to select a disease. Using the data lines you are going to input some type of geographic variable (Country, Zip code, or State). You are going to have three columns of information Geography, Year, Incidence or Prevalence rate.

Your title should accurately reflect what your graph represents. In footnote1 you will need to include in APA all the references that you used to make the table.