checkoutWHO

EH

11/9/2021

```
library(readr)
who = read_csv('../../DATA621/Life Expectancy Data.csv.xls')
## Rows: 2938 Columns: 22
## -- Column specification ------
## Delimiter: ","
## chr (2): Country, Status
## dbl (20): Year, Life expectancy, Adult Mortality, infant deaths, Alcohol, pe...
##
## i Use 'spec()' to retrieve the full column specification for this data.
## i Specify the column types or set 'show_col_types = FALSE' to quiet this message.
head(who)
## # A tibble: 6 x 22
    Country Year Status 'Life expectanc~ 'Adult Mortalit~ 'infant deaths' Alcohol
    <chr>
          <dbl> <chr>
                          <dbl>
                                            <dbl>
                                                           <dbl>
                                                                          <dbl>
## 1 Afghan~ 2015 Devel~
                                   65
                                                     263
                                                                     62
                                                                           0.01
## 2 Afghan~ 2014 Devel~
                                   59.9
                                                     271
                                                                     64
                                                                           0.01
## 3 Afghan~ 2013 Devel~
                                                                     66
                                                                           0.01
                                  59.9
                                                     268
## 4 Afghan~ 2012 Devel~
                                   59.5
                                                     272
                                                                     69
                                                                           0.01
## 5 Afghan~ 2011 Devel~
                                    59.2
                                                     275
                                                                     71
                                                                           0.01
## 6 Afghan~ 2010 Devel~
                                    58.8
                                                     279
                                                                           0.01
## # ... with 15 more variables: percentage expenditure <dbl>, Hepatitis B <dbl>,
      Measles <dbl>, BMI <dbl>, under-five deaths <dbl>, Polio <dbl>,
      Total expenditure <dbl>, Diphtheria <dbl>, HIV/AIDS <dbl>, GDP <dbl>,
## #
      Population <dbl>, thinness 1-19 years <dbl>, thinness 5-9 years <dbl>,
      Income composition of resources <dbl>, Schooling <dbl>
summary(who)
```

Status

Length:2938

Life expectancy

Mean :69.22

3rd Qu.:75.70

:36.30

Min.

Class:character 1st Qu.:63.10

Mode :character Median :72.10

Year

Min. :2000

1st Qu.:2004

Mean :2008

3rd Qu.:2012

##

##

##

Country

Class :character

Mode :character Median :2008

Length:2938

```
##
                                 :2015
                                                                      :89.00
                         Max.
                                                              Max.
##
                                                              NA's
                                                                      :10
                                                            percentage expenditure
##
    Adult Mortality infant deaths
                                            Alcohol
                                  0.0
                                                : 0.0100
                                                                         0.000
##
    Min.
            : 1.0
                     Min.
                                        Min.
                                                            Min.
##
    1st Qu.: 74.0
                     1st Qu.:
                                  0.0
                                        1st Qu.: 0.8775
                                                            1st Qu.:
                                                                         4.685
##
    Median :144.0
                     Median:
                                  3.0
                                        Median: 3.7550
                                                            Median:
                                                                        64.913
##
    Mean
            :164.8
                     Mean
                                30.3
                                        Mean
                                                : 4.6029
                                                            Mean
                                                                    :
                                                                       738.251
##
    3rd Qu.:228.0
                     3rd Qu.:
                                22.0
                                        3rd Qu.: 7.7025
                                                            3rd Qu.:
                                                                       441.534
##
    Max.
            :723.0
                     Max.
                             :1800.0
                                        Max.
                                                :17.8700
                                                            Max.
                                                                    :19479.912
##
    NA's
            :10
                                        NA's
                                                :194
##
     Hepatitis B
                         Measles
                                                BMI
                                                            under-five deaths
##
    Min.
            : 1.00
                     Min.
                                    0.0
                                          Min.
                                                  : 1.00
                                                            Min.
                                                                    :
                                                                        0.00
##
    1st Qu.:77.00
                     1st Qu.:
                                    0.0
                                          1st Qu.:19.30
                                                            1st Qu.:
                                                                        0.00
                     Median:
                                   17.0
                                          Median :43.50
##
    Median :92.00
                                                            Median :
                                                                        4.00
                                2419.6
##
    Mean
            :80.94
                     Mean
                                          Mean
                                                  :38.32
                                                            Mean
                                                                       42.04
##
    3rd Qu.:97.00
                     3rd Qu.:
                                  360.2
                                          3rd Qu.:56.20
                                                            3rd Qu.:
                                                                       28.00
##
    Max.
            :99.00
                             :212183.0
                                                  :87.30
                                                                    :2500.00
                     Max.
                                          Max.
                                                            Max.
##
    NA's
            :553
                                          NA's
                                                  :34
##
                                                              HIV/AIDS
        Polio
                     Total expenditure
                                           Diphtheria
##
    Min.
            : 3.00
                     Min.
                             : 0.370
                                         Min.
                                                 : 2.00
                                                           Min.
                                                                   : 0.100
##
    1st Qu.:78.00
                     1st Qu.: 4.260
                                         1st Qu.:78.00
                                                           1st Qu.: 0.100
    Median :93.00
                     Median : 5.755
                                         Median :93.00
##
                                                           Median : 0.100
##
    Mean
            :82.55
                             : 5.938
                                         Mean
                                                 :82.32
                                                                   : 1.742
                     Mean
                                                           Mean
    3rd Qu.:97.00
                     3rd Qu.: 7.492
##
                                         3rd Qu.:97.00
                                                           3rd Qu.: 0.800
##
    Max.
            :99.00
                     Max.
                             :17.600
                                         Max.
                                                 :99.00
                                                           Max.
                                                                   :50.600
##
    NA's
            :19
                     NA's
                             :226
                                         NA's
                                                 :19
##
         GDP
                            Population
                                                thinness
                                                           1-19 years
##
    Min.
                  1.68
                                  :3.400e+01
                                                Min.
                                                        : 0.10
                          Min.
                          1st Qu.:1.958e+05
##
    1st Qu.:
                463.94
                                                1st Qu.: 1.60
##
    Median :
               1766.95
                          Median :1.387e+06
                                                Median: 3.30
##
    Mean
            :
               7483.16
                          Mean
                                  :1.275e+07
                                                Mean
                                                        : 4.84
##
    3rd Qu.:
               5910.81
                          3rd Qu.:7.420e+06
                                                3rd Qu.: 7.20
##
    Max.
            :119172.74
                          Max.
                                  :1.294e+09
                                                Max.
                                                        :27.70
##
    NA's
            :448
                          NA's
                                  :652
                                                NA's
                                                        :34
##
    thinness 5-9 years Income composition of resources
                                                              Schooling
##
    Min.
            : 0.10
                         Min.
                                 :0.0000
                                                            Min.
                                                                    : 0.00
##
    1st Qu.: 1.50
                         1st Qu.:0.4930
                                                            1st Qu.:10.10
##
    Median: 3.30
                         Median :0.6770
                                                            Median :12.30
    Mean
            : 4.87
##
                         Mean
                                 :0.6276
                                                            Mean
                                                                    :11.99
##
    3rd Qu.: 7.20
                         3rd Qu.:0.7790
                                                            3rd Qu.:14.30
##
    Max.
            :28.60
                         Max.
                                 :0.9480
                                                            Max.
                                                                    :20.70
    NA's
                         NA's
                                                            NA's
                                                                    :163
##
            :34
                                 :167
```

Variables in the data, with descriptions

• Country

- Year
- Status: Developed or developing
- Adult Mortality: Adult Mortality Rates of both sexes (probability of dying between 15 and 60 years per 1000 population)
- infant deaths: Number of Infant Deaths per 1000 population

- Alcohol: Alcohol, recorded per capita (15+) consumption (in litres of pure alcohol)
- percentage expenditure: Expenditure on health as a percentage of Gross Domestic Product per capita (%)
- Hepatitis B: Hepatitis B (HepB) immunization coverage among 1-year-olds (%)
- Measles: Measles number of reported cases per 1000 population
- BMI: Average Body Mass Index of entire population
- under-five deaths: Number of under-five deaths per 1000 population
- Polio: Polio (Pol3) immunization coverage among 1-year-olds (%)
- Total expenditure: General government expenditure on health as a percentage of total government expenditure (%)
- **Diphtheria**: Diphtheria tetanus toxoid and pertussis (DTP3) immunization coverage among 1-year-olds (%)
- HIV/AIDS: Deaths per 1000 live births HIV/AIDS (0-4 years)
- GDP: Gross Domestic Product per capita (in USD)
- **Population**: Population of the country
- thinness 1-19 years: Prevalence of thinness among children and adolescents for Age 10 to 19 (%)
- thinness 5-9 years: Prevalence of thinness among children for Age 5 to 9 (%)
- Income composition of resources: Human Development Index in terms of income composition of resources (index ranging from 0 to 1)
- Schooling: Number of years of Schooling