## Practical session: Numerical explorations with R

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## Practical session

- Read in the csv dataset named maltreat
- Explore the data
  - How many rows and columns does the dataset have?
  - List the variable names in the dataset
  - List the first 6 rows of the dataset
  - List the last 6 rows of the dataset
  - Extract the data in row 23 column 6
  - Extract the data in column 5
  - Extract the data in row 306
  - Extract all the data that lie within row 12 to 14 and column 2 to 5
- Summarize the data
  - Compute the summary statistics of all the continous variables
    - using the function summary()
    - using the specific functions
  - Tabulate the categorical variables by ethnic, compute the cell percentages and test for any association between the variables
  - Tabulate the categorical variables by ethnic and sex and then test for any pairwise association

## Practical session

- using the bwmal data:
  - create a categorical varible pregnancy\_beyond\_20\_weeks
    - For a woman who has never carried a pregnancy beyond 20 weeks is nulliparous (parity= 0),
    - A woman who has given birth once before is primiparous (parity= 1),
    - A woman who has given birth two or more times is multiparous (parity> 2)
    - A grand multipara is a woman who has given birth three or more times (parity> 3).
  - Compute summary statistics for birth weight and the mother's age by the new variable