08_Maternal Mortality_eda

Group K

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1. Loading the dataset

```
## # A tibble: 5 x 29
##   ISO3   DataId Indicator Value Precision DHS_CountryCode CountryName SurveyYear
##   <chr>  <chr>  <chr>     <chr> <chr>     <chr>           <chr>       <chr>
## 1 #coun~ #meta~ #indicat~ #ind~ #indicat~ <NA>            #country+n~ #date+year
## 2 ZAF    91409  Female d~ 5.5   1         ZA              South Afri~ 1998
## 3 ZAF    91377  Number o~ 19    0         ZA              South Afri~ 1998
## 4 ZAF    768646 Years of~ 1227~ 0         ZA              South Afri~ 1998
## 5 ZAF    768647 Years of~ 1237~ 0         ZA              South Afri~ 1998
## # i 21 more variables: SurveyId <chr>, IndicatorId <chr>, IndicatorOrder <dbl>,
## #   IndicatorType <chr>, CharacteristicId <dbl>, CharacteristicOrder <dbl>,
## #   CharacteristicCategory <chr>, CharacteristicLabel <chr>,
## #   ByVariableId <chr>, ByVariableLabel <chr>, IsTotal <dbl>,
## #   IsPreferred <dbl>, SDRID <chr>, RegionId <lgl>, SurveyYearLabel <dbl>,
## #   SurveyType <chr>, DenominatorWeighted <dbl>, DenominatorUnweighted <dbl>,
## #   CILow <dbl>, CIHigh <dbl>, LevelRank <lgl>
```

Dislay the first 5 rows

Table 1: First 5 rows of the Dataset

ISO3	DataId	Indicator	Value	CountryName	SurveyYear
ZAF	91409	Female deaths that are pregnancy-related	5.5	South Africa	1998
ZAF	91377	Number of pregnancy-related deaths	19	South Africa	1998
ZAF	768646	Years of exposure to the risk of mortality for women	122701	South Africa	1998
ZAF	768647	Years of exposure to the risk of mortality for women (unweighted)	123738	South Africa	1998
ZAF	535566	Pregnancy-related mortality rate	0.15	South Africa	1998

2. Data Overview

Summary statistics

Table 2: Summary Statistics for Key Numeric Variables in the Dataset

Variable	Statistic	Value
CIHigh	mean	580.0000
CIHigh	sd	312.2163
CIHigh	min	223.0000
CIHigh	max	802.0000
CILow	mean	193.6667
CILow	sd	102.6272
CILow	min	77.0000
CILow	max	270.0000
DenominatorUnweighted	mean	93630.5000
DenominatorUnweighted	sd	32981.1138
DenominatorUnweighted	min	63523.0000
DenominatorUnweighted	max	123738.0000
DenominatorWeighted	mean	92734.5000
DenominatorWeighted	sd	42379.0307
DenominatorWeighted	min	62768.0000
DenominatorWeighted	max	122701.0000
Value	mean	17881.5210
Value	sd	39766.9602
Value	min	0.0050
Value	max	123738.0000

3. Data Quality

Missing values per column

```
##                   ISO3               DataId               Indicator
##                      0                    0                       0
##                  Value            Precision         DHS_CountryCode
##                      0                    0                       1
##            CountryName           SurveyYear                SurveyId
##                      0                    0                       0
##            IndicatorId       IndicatorOrder           IndicatorType
##                      0                    1                       1
##         CharacteristicId  CharacteristicOrder CharacteristicCategory
##                      1                    1                       1
##      CharacteristicLabel          ByVariableId           ByVariableLabel
##                      1                    0                      21
##                IsTotal          IsPreferred                   SDRID
##                      1                    1                       1
##               RegionId      SurveyYearLabel              SurveyType
##                     22                    1                       1
##    DenominatorWeighted DenominatorUnweighted                   CILow
##                     20                   16                      19
##                 CIHigh            LevelRank
##                     19                   22
```
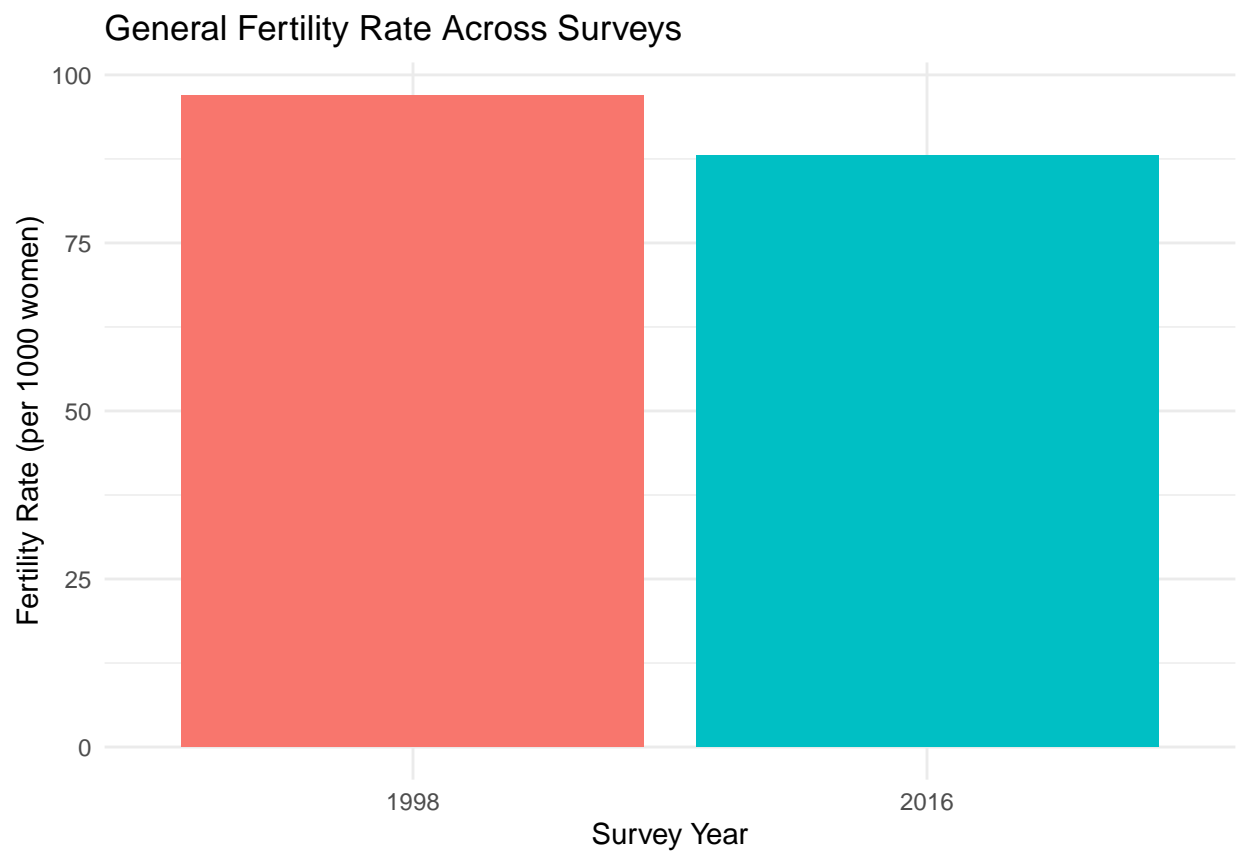
Dupilcates

[1] 0

4. Visualizations

Bar plot showing the distribution of fertility-related indicators

General Fertility Rate Across Surveys

Point plot with error bars to visualize the Pregnancy-related mortality ratio along with its lower and upper bounds.

Pregnancy–Related Mortality Ratio with 95% CI