

EDA_Child_Mortality_Rates_National_03

Group K

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1. Loading the dataset

Display the first 5 rows

Table 1: First 5 rows of the Access to Health Care Dataset (excluding first row)

ISO3	DataId	Indicator	Value	CountryName	SurveyYear
ZAF	85995	Neonatal mortality rate (5 year periods)	20	South Africa	1998
ZAF	794581	Postneonatal mortality (5 year periods)	26	South Africa	1998
ZAF	785930	Infant mortality rate (5 year periods)	45	South Africa	1998
ZAF	56239	Child mortality (5 year periods)	15	South Africa	1998
ZAF	101014	Under-five mortality rate (5 year periods)	59	South Africa	1998

2. Data Overview

Summary statistics

Table 2: Summary Statistics for Numeric Variables in the Dataset

Variable	Statistic	Value
CIHigh	mean	3.520000e+01
CIHigh	sd	1.760368e+01
CIHigh	min	1.000000e+01
CIHigh	max	6.800000e+01
CILow	mean	2.276667e+01
CILow	sd	1.436875e+01
CILow	min	4.000000e+00
CILow	max	5.000000e+01
CharacteristicId	mean	6.250000e+03
CharacteristicId	sd	5.424304e+03
CharacteristicId	min	1.000000e+03
CharacteristicId	max	1.300000e+04
CharacteristicOrder	mean	2.250000e+04
CharacteristicOrder	sd	3.387382e+04
CharacteristicOrder	min	0.000000e+00

Variable	Statistic	Value
CharacteristicOrder	max	8.000000e+04
DenominatorUnweighted	mean	4.373000e+03
DenominatorUnweighted	sd	9.353074e+02
DenominatorUnweighted	min	3.563000e+03
DenominatorUnweighted	max	5.183000e+03
DenominatorWeighted	mean	4.348000e+03
DenominatorWeighted	sd	8.902741e+02
DenominatorWeighted	min	3.577000e+03
DenominatorWeighted	max	5.119000e+03
IndicatorOrder	mean	6.320353e+07
IndicatorOrder	sd	2.519158e+04
IndicatorOrder	min	6.316601e+07
IndicatorOrder	max	6.323605e+07
IsPreferred	mean	7.500000e-01
IsPreferred	sd	4.385290e-01
IsPreferred	min	0.000000e+00
IsPreferred	max	1.000000e+00
IsTotal	mean	1.000000e+00
IsTotal	sd	0.000000e+00
IsTotal	min	1.000000e+00
IsTotal	max	1.000000e+00
SurveyYearLabel	mean	2.007000e+03
SurveyYearLabel	sd	9.114654e+00
SurveyYearLabel	min	1.998000e+03
SurveyYearLabel	max	2.016000e+03

3. Data Quality

Find duplicated values

```
## [1] 0
```

```
#Inspect columns for missing/empty data as values and pecentages respectively
```

```
##          IS03          DataId          Indicator
##          0          0          0
##          Value          Precision          DHS_CountryCode
##          1          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          20
##          IsTotal          IsPreferred          SDRID
##          1          1          1
##          RegionId          SurveyYearLabel          SurveyType
##          41          1          1
```

##	DenominatorWeighted	DenominatorUnweighted	CILow
##	37	37	11
##	CIHigh	LevelRank	
##	11	41	
##	IS03	DataId	Indicator
##	0.00	0.00	0.00
##	Value	Precision	DHS_CountryCode
##	2.44	0.00	2.44
##	CountryName	SurveyYear	SurveyId
##	0.00	0.00	0.00
##	IndicatorId	IndicatorOrder	IndicatorType
##	0.00	2.44	2.44
##	CharacteristicId	CharacteristicOrder	CharacteristicCategory
##	2.44	2.44	2.44
##	CharacteristicLabel	ByVariableId	ByVariableLabel
##	2.44	0.00	48.78
##	IsTotal	IsPreferred	SDRID
##	2.44	2.44	2.44
##	RegionId	SurveyYearLabel	SurveyType
##	100.00	2.44	2.44
##	DenominatorWeighted	DenominatorUnweighted	CILow
##	90.24	90.24	26.83
##	CIHigh	LevelRank	
##	26.83	100.00	

Check for unique values

##	IS03	DataId	Indicator
##	2	41	16
##	Value	Precision	DHS_CountryCode
##	28	2	2
##	CountryName	SurveyYear	SurveyId
##	2	3	3
##	IndicatorId	IndicatorOrder	IndicatorType
##	16	16	4
##	CharacteristicId	CharacteristicOrder	CharacteristicCategory
##	4	4	4
##	CharacteristicLabel	ByVariableId	ByVariableLabel
##	4	4	4
##	IsTotal	IsPreferred	SDRID
##	2	3	16
##	RegionId	SurveyYearLabel	SurveyType
##	1	3	2
##	DenominatorWeighted	DenominatorUnweighted	CILow
##	3	3	19
##	CIHigh	LevelRank	
##	16	1	

4. Visualizations

Bar plot of mortality indicators for a specific year

