Stats desc 2015

Noémie Guibe

2022-12-12

```
library(tidyverse)
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.3.2 --
## v ggplot2 3.3.6      v purrr   0.3.4
## v tibble  3.1.8      v dplyr   1.0.10
## v tidyr   1.2.1      v stringr 1.4.1
## v readr   2.1.2      v forcats 0.5.2
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
pop2015 <- read_csv(here::here("data/pop2015.csv"))
```

```
## New names:
## Rows: 56002 Columns: 14
## -- Column specification
## -------------------------------------------------------- Delimiter: "," chr
## (3): rf_inftr, rf_fedrg, rf_artec dbl (11): ...1, mager, mrace6, dmar, meduc,
## fagerec11, frace6, feduc, priorl...
## 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.
## * `` -> `...1`
```

```
head(pop2015)
```

```
## # A tibble: 6 x 14
##    ...1 mager mrace6  dmar meduc fagerec11 frace6 feduc priorl~1 rf_in~2 rf_fe~3
##   <dbl> <dbl>  <dbl> <dbl> <dbl>     <dbl>  <dbl> <dbl>    <dbl> <chr>   <chr>
## 1     1    30     10     1     4         7      1     4        0 Y       Y
## 2     2    29     10     1     7         4      1     4        0 Y       N
## 3     3    34     10     1     8         7      1     8        0 Y       N
## 4     4    24     10     1     4         6      1     6        0 Y       Y
## 5     5    34     10     1     8         6      1     6        0 Y       N
## 6     6    27     10     1     6         4      1     4        0 Y       Y
## # ... with 3 more variables: rf_artec <chr>, apgar5r <dbl>, dbwt <dbl>, and
## #   abbreviated variable names 1: priorlive, 2: rf_inftr, 3: rf_fedrg
```

```
table(pop2015$rf_artec)
```

```
##
##     N     U     Y
## 20633  4819 30550
```

```
round(table(pop2015$rf_fedrg)/length(pop2015$rf_fedrg),3) # soit 45%
```

```
##
##     N     U     Y
## 0.466 0.086 0.448
```

```
table(pop2015$rf_artec)
```

```
##
##     N     U     Y
## 20633  4819 30550
```

```
round(table(pop2015$rf_artec)/length(pop2015$rf_artec),3) # soit 55%
```

```
##
##     N     U     Y
## 0.368 0.086 0.546
```

```
# recoupement absent?

round(table(pop2015$priorlive)/length(pop2015$priorlive),3)
```

```
##
##     0     1     2     3     4     5     6     7     8     9    10    11    12
## 0.561 0.310 0.088 0.027 0.009 0.003 0.001 0.001 0.000 0.000 0.000 0.000 0.000
```

Parmi ceux qui ont eu recours à des traitements contre l'infertilité:

- 27722 ont recours à des traitements contre l'infertilité sous forme de médicaments ou insémination artificielle;
- 34235 sous forme d'assisted reproductive technology (ART) (IVF ou autres)

De plus, 56% n'ont pas eu d'enfant auparavant

AGE DES PARENTS

Age de la mère : 12 10 – 12 years 13 13 years . . . 49 49 years 50 50 years and over

Age du père : 01 Under 15 years 02 15-19 years 03 20-24 years 04 25-29 years 05 30-34 years 06 35-39 years 07 40-44 years 08 45-49 years 09 50-54 years 10 55-98 years 11 Not stated

```
summary(select(pop2015,mager))
```

```
##      mager
##  Min.   :15.00
##  1st Qu.:30.00
##  Median :34.00
##  Mean   :33.97
##  3rd Qu.:37.00
##  Max.   :50.00
```

```
summary(select(pop2015,fagerec11))
```

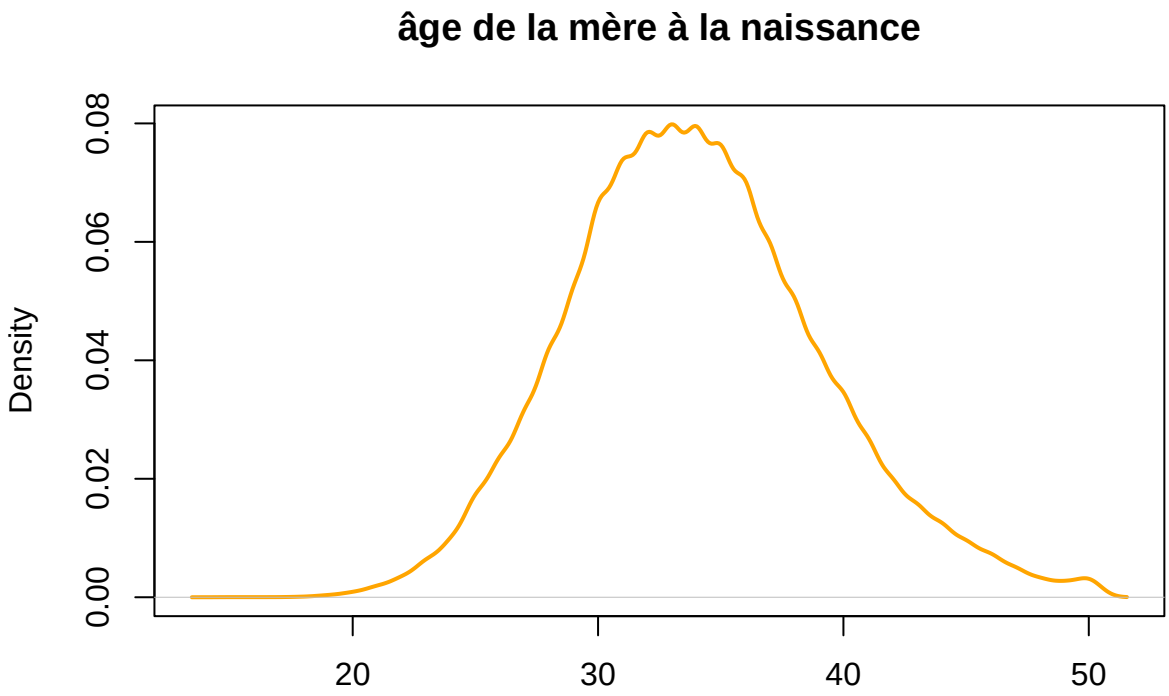
```
##    fagerec11
##  Min.   : 2.000
##  1st Qu.: 5.000
##  Median : 6.000
##  Mean   : 5.859
##  3rd Qu.: 7.000
##  Max.   :10.000
```

```
round(table(pop2015$fagerec11)/length(pop2015$fagerec11),3)
```

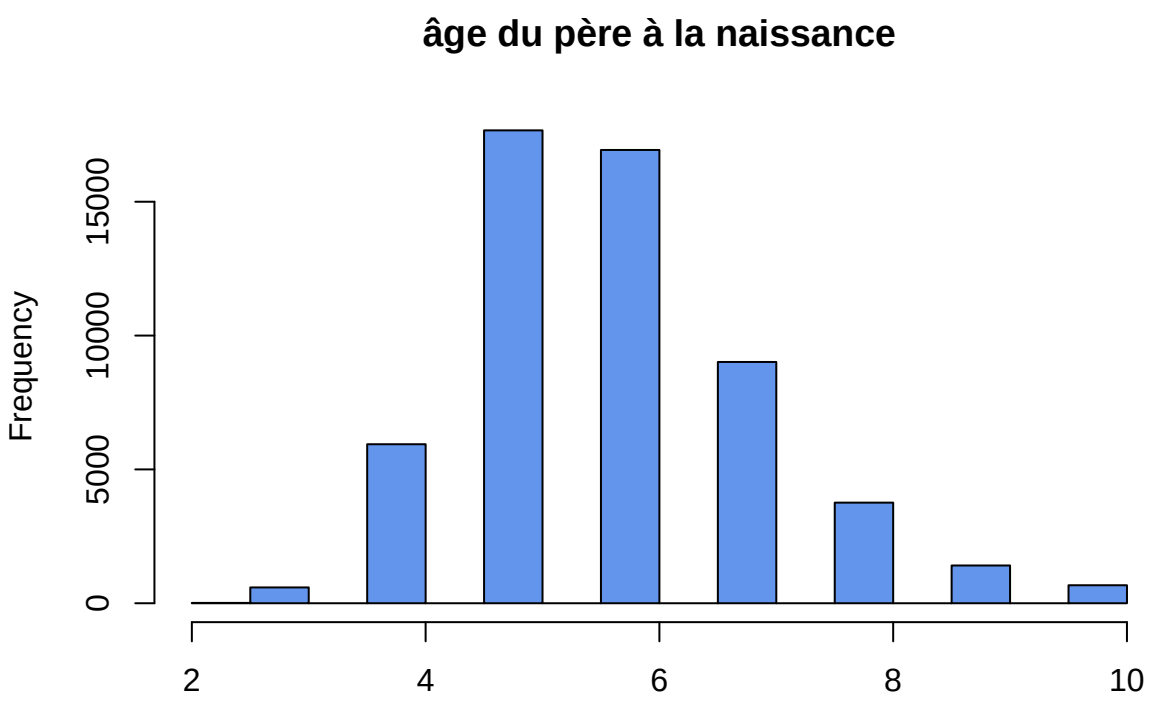
```
##
##     2     3     4     5     6     7     8     9    10
## 0.000 0.011 0.106 0.315 0.302 0.161 0.067 0.025 0.012
```

60% des pères sont âgés de 30 à 39 ans

```
plot(density(pop2015$mager), lwd = 2, col = "orange", xlab = "", main = "âge de la mère à la naissance")
```




```
hist(pop2015$fagerec11, col = "cornflowerblue", xlab = "", main  = "âge du père à la naissance")
```



ETHNIE DES PARENTS

Race de la mère : 1 White (only) 3 AIAN (American Indian or Alaskan Native) (only) 4 Asian (only) 5 NHOPI (Native Hawaiian or Other Pacific Islander) (only) 6 More than one race

Ethnie du père : 1.34, 75% blanc 1 White (only) 2 Black (only) 3 AIAN (only) 4 Asian (only) 5 NHOPI (only) 6 More than one race 9 Unknown or Not Stated

```
summary(select(pop2015,mrace6))
```

```
##      mrace6
##  Min.   :10.00
##  1st Qu.:10.00
##  Median :10.00
##  Mean   :14.48
##  3rd Qu.:10.00
##  Max.   :61.00
```

```
summary(select(pop2015,frace6))
```

```
##      frace6
##  Min.   :1.000
##  1st Qu.:1.000
```

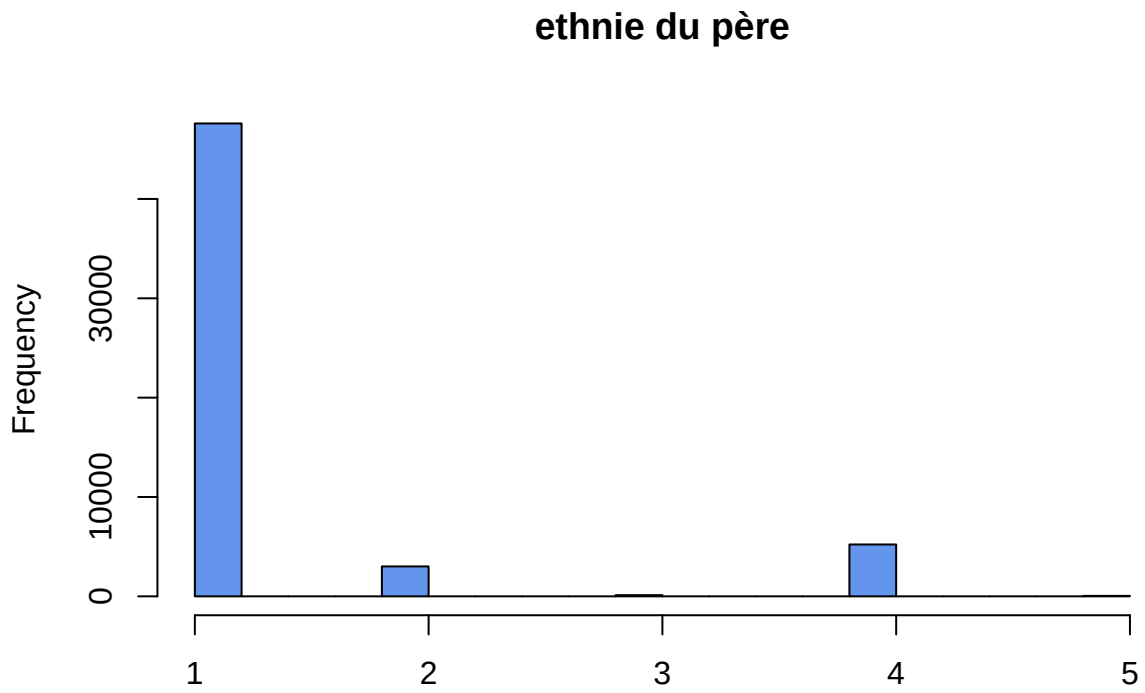
```
##  Median :1.000
##  Mean   :1.341
##  3rd Qu.:1.000
##  Max.   :5.000
```

```
round(table(pop2015$frace6)/length(pop2015$frace6),3)
```

```
##
##     1     2     3     4     5
## 0.850 0.054 0.002 0.093 0.001
```

```
# 85 % des pères sont blancs, 9% asiatiques et 5% noirs
```

```
hist(pop2015$frace6, col = "cornflowerblue", xlab = "", main  = "ethnie du père")
```



EDUCATION DES PARENTS

éducation de la mère : 1 8th grade or less 2 9th through 12th grade with no diploma 3 High school graduate or GED completed 4 Some college credit, but not a degree. 5 Associate degree (AA,AS) 6 Bachelor's degree (BA, AB, BS) 7 Master's degree (MA, MS, MEng, MEd, MSW, MBA) 8 Doctorate (PhD, EdD) or Professional Degree (MD, DDS,DVM, LLB, JD) 9 Unknown

Education du père : 5.6, 1 8th grade or less 2 9th through 12th grade with no diploma 3 High school graduate or GED completed 4 Some college credit, but not a degree. 5 Associate degree (AA,AS) 6 Bachelor's

degree (BA, AB, BS) 7 Master's degree (MA, MS, MEng, MEd, MSW, MBA) 8 Doctorate (PhD, EdD) or Professional Degree (MD, DDS,DVM, LLB, JD) 9 Unknown

```
summary(select(pop2015,meduc))
```

```
##      meduc
##  Min.   :1.000
##  1st Qu.:5.000
##  Median :6.000
##  Mean   :5.867
##  3rd Qu.:7.000
##  Max.   :8.000
```

```
summary(select(pop2015,feduc))
```

```
##      feduc
##  Min.   :1.000
##  1st Qu.:4.000
##  Median :6.000
##  Mean   :5.596
##  3rd Qu.:7.000
##  Max.   :8.000
```

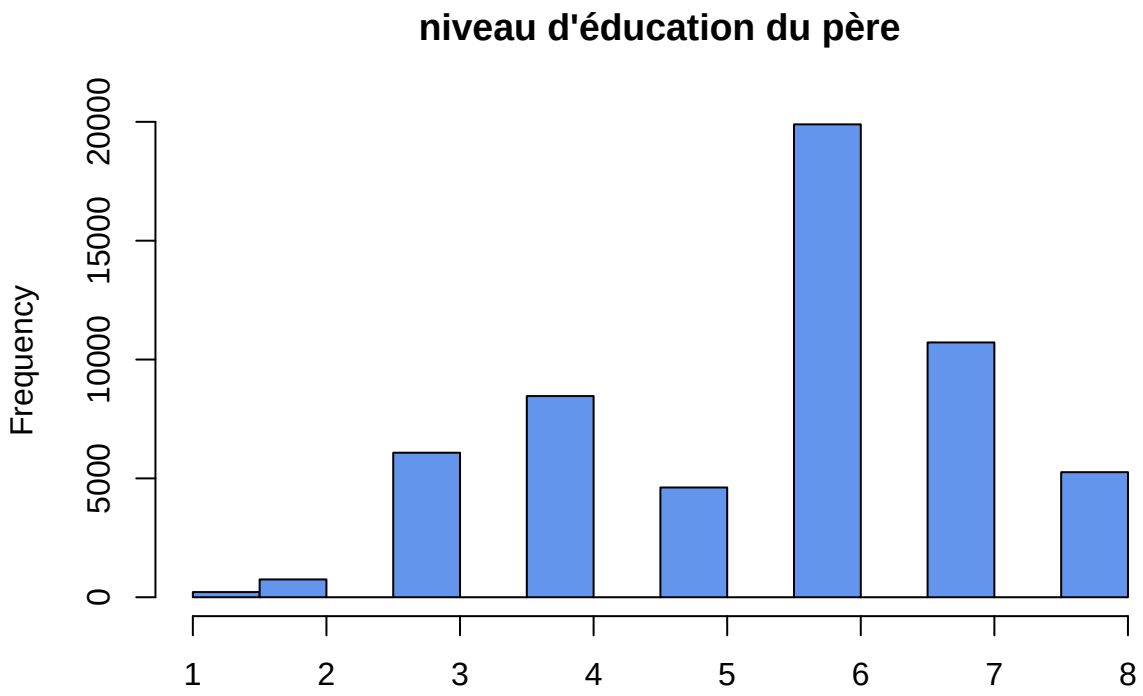
```
round(table(pop2015$meduc)/length(pop2015$meduc),3)
```

```
##
##     1     2     3     4     5     6     7     8
## 0.003 0.008 0.065 0.116 0.089 0.376 0.256 0.087
```

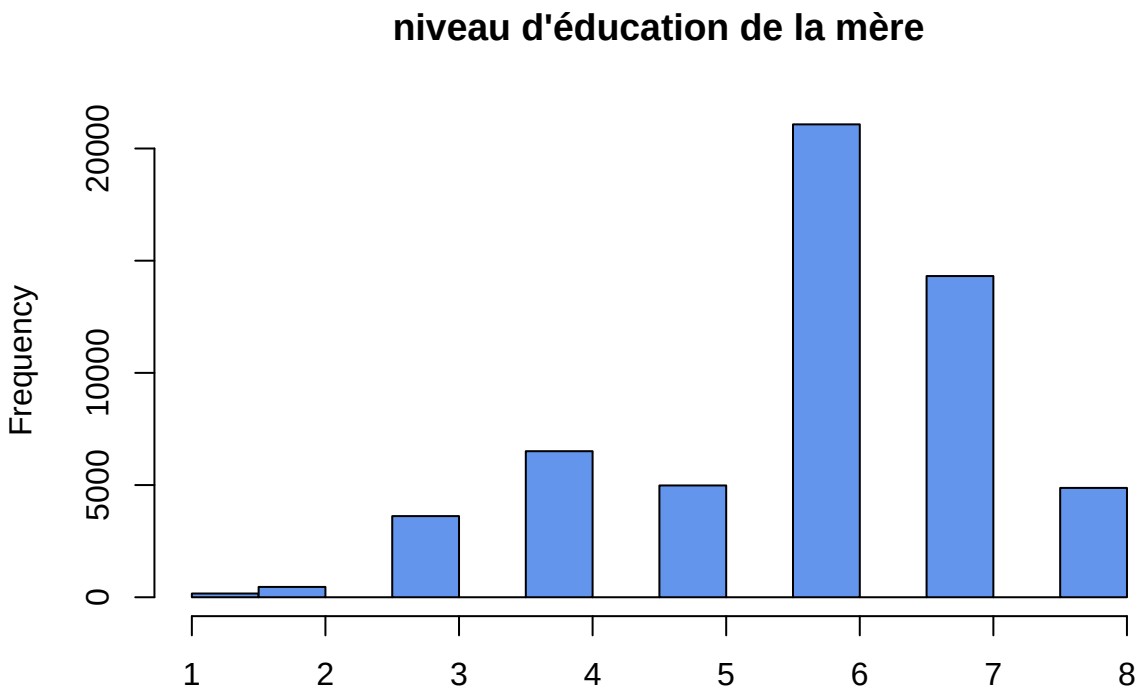
```
round(table(pop2015$feduc)/length(pop2015$feduc),3)
```

```
##
##     1     2     3     4     5     6     7     8
## 0.004 0.013 0.109 0.151 0.082 0.355 0.191 0.094
```

```
hist(pop2015$feduc, col = "cornflowerblue", xlab = "", main  = "niveau d'éducation du père")
```




```
hist(pop2015$meduc, col = "cornflowerblue", xlab = "", main  = "niveau d'éducation de la mère")
```



CARECTERISTIQUES DU COUPLE

Statut marital : 1 Married 2 Unmarried

Enfant(s) encore en vie : 00-30 Number of children still living from previous live births. 99 Unknown or not stated

```
summary(select(pop2015,dmar))
```

```
##       dmar
##  Min.   :1.000
##  1st Qu.:1.000
##  Median :1.000
##  Mean   :1.033
##  3rd Qu.:1.000
##  Max.   :2.000
```

```
summary(select(pop2015,priorlive))
```

```
##    priorlive
##  Min.   : 0.0000
##  1st Qu.: 0.0000
##  Median : 0.0000
```

```
##  Mean   : 0.6318
##  3rd Qu.: 1.0000
##  Max.   :12.0000
```

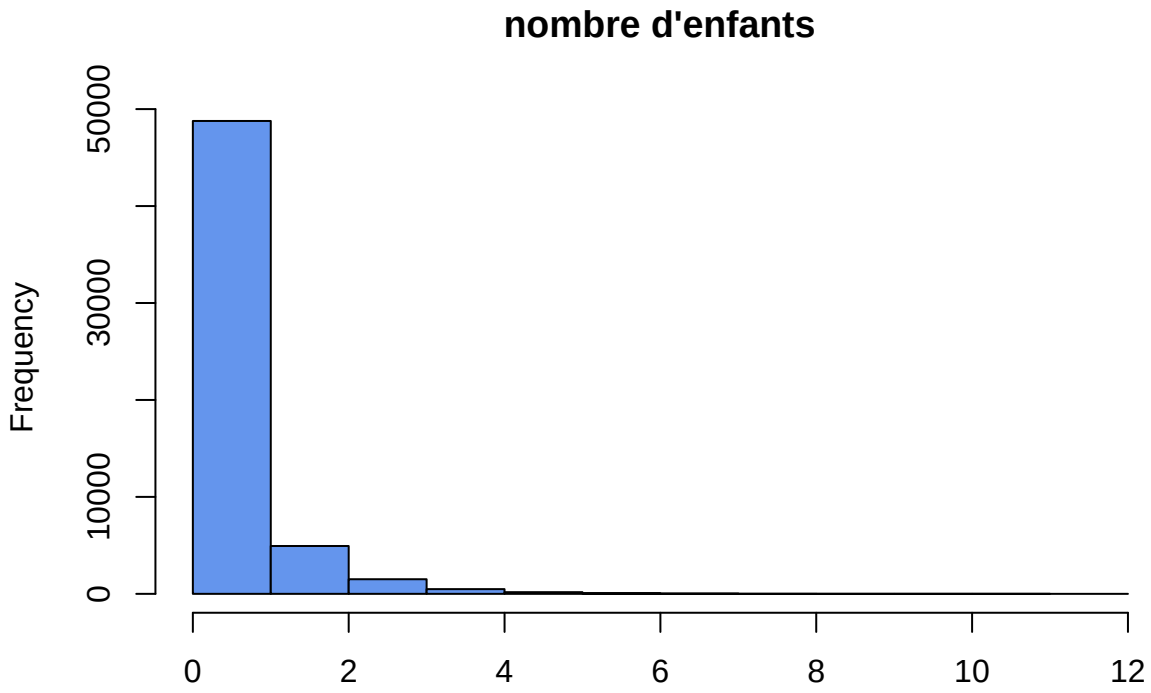
```
round(table(pop2015$dmar)/length(pop2015$dmar),3) # 97% sont mariés
```

```
##
##     1     2
## 0.967 0.033
```

```
round(table(pop2015$priorlive)/length(pop2015$priorlive),3) # 87% ont déjà au plus un enfant
```

```
##
##     0     1     2     3     4     5     6     7     8     9    10    11    12
## 0.561 0.310 0.088 0.027 0.009 0.003 0.001 0.001 0.000 0.000 0.000 0.000 0.000
```

```
hist(pop2015$priorlive, col = "cornflowerblue", xlab = "", main  = "nombre d'enfants")
```



SANTE DE L'ENFANT

Score Apgar : 3.76, 50% au moins 9 1 A score of 0-3 2 A score of 4-6 3 A score of 7-8 4 A score of 9-10 5 Unknown or not stated

Poids à la naissance : 0227-8165 Number of grams 9999 Not stated birth weight

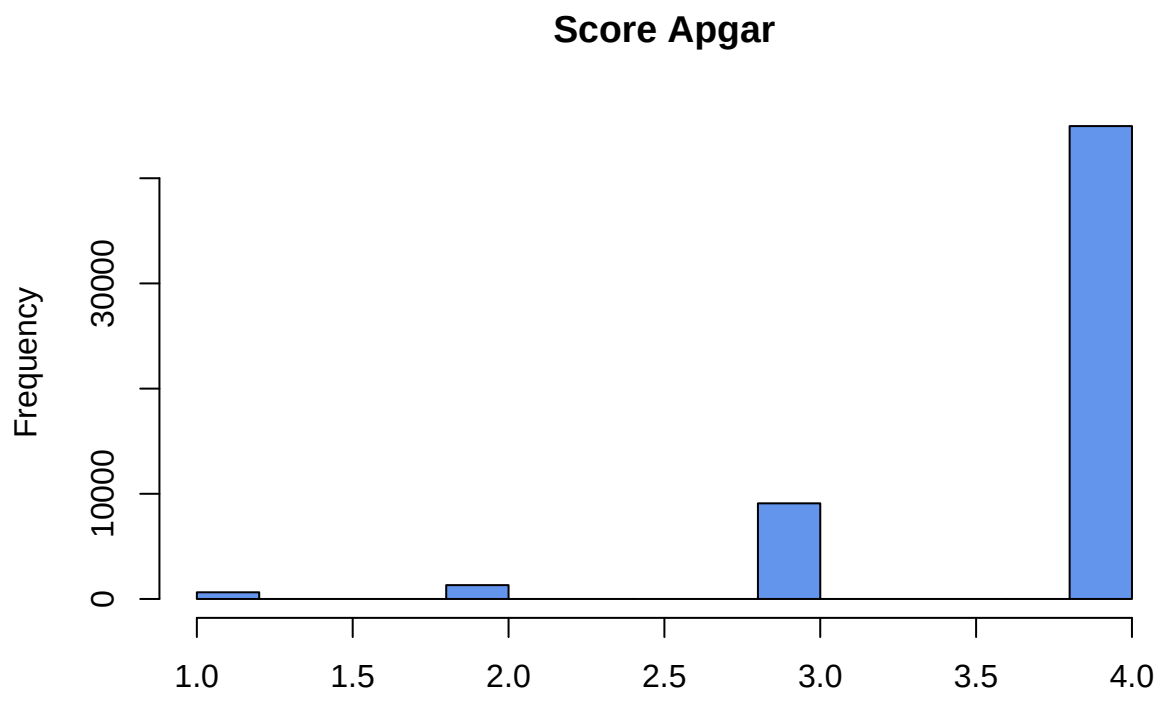
```
summary(select(pop2015,apgar5r))
```

```
##     apgar5r
##  Min.   :1.000
##  1st Qu.:4.000
##  Median :4.000
##  Mean   :3.757
##  3rd Qu.:4.000
##  Max.   :4.000
```

```
summary(select(pop2015,dbwt))
```

```
##       dbwt
##  Min.   : 227
##  1st Qu.:2529
##  Median :3072
##  Mean   :2982
##  3rd Qu.:3510
##  Max.   :9999
```

```
hist(pop2015$apgar5r, col = "cornflowerblue", xlab = "", main  = "Score Apgar")
```



```
plot(density(pop2015$dbwt), lwd = 2, col = "orange", xlab = "", main = "poids à la naissance")
```