

ChildrenMortalityRateRMD

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Visualization of Millions of Children's Lives Have Been Saved

One direct effect of human progress is longer lives. 100 years ago, nearly half the world's children died before the age of 5. Today it's less than 4%. Meaning millions have had a chance at life. That's progress. <http://rmarkdown.rstudio.com>.

```
knitr::include_graphics("595-childrens-lives-saved.png")
```

Millions of Children's Lives Have Been Saved

Due to better healthcare, education & social conditions

East Asia & Pacific
Europe & Central Asia
Latin America & Caribbean
Middle East & North Africa
South Asia
Sub-Saharan Africa

750
per day

270,000
per year

6.8m
over 25 years

Major Reasons Why



beautifulnews

sources: GapMinder, OurWorldinData.org

When you click the **Knit** button a document will be generated that includes both content as well as the output of any embedded R code chunks within the document. You can embed an R code chunk like this:

```
library(tidyverse)
```

```
## -- Attaching packages -----  
tidyverse 1.3.0 --
```

```
## <U+2713> ggplot2 3.3.0      <U+2713> purrr  0.3.3  
## <U+2713> tibble  2.1.3      <U+2713> dplyr  0.8.3
```

```

## <U+2713> tidyr    1.0.2      <U+2713> stringr 1.4.0
## <U+2713> readr    1.3.1      <U+2713> forcats 0.4.0

## -- Conflicts -----
tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()

library(ggplot2)
library(RColorBrewer)
library(ggthemes)

## Warning: package 'ggthemes' was built under R version 3.6.3

library(ggrepel)
library(directlabels)

## Warning: package 'directlabels' was built under R version 3.6.3

library(scales)

##
## Attaching package: 'scales'

## The following object is masked from 'package:purrr':
##
##   discard

## The following object is masked from 'package:readr':
##
##   col_factor

lives <- read.csv("Children Deaths.csv", header = TRUE,
stringsAsFactors=FALSE)
str(lives)

## 'data.frame':    28 obs. of  9 variables:
##  $ Year                : int  1990 1991 1992 1993 1994 1995 1996
1997 1998 1999 ...
##  $ East.Asia...Pacific : int  2322193 2223423 2101113 1965667
1829249 1698666 1580842 1475294 1379892 1293329 ...
##  $ Europe...Central.Asia : int  387676 371131 355718 339979 323201
305546 287570 269782 252476 236050 ...
##  $ Latin.America...Caribbean : int  646505 618393 590179 562116 534465
507178 480424 454347 433874 407991 ...
##  $ South.Asia          : int  4732653 4616893 4501408 4387427
4272497 4155381 4035431 3911706 3784813 3656159 ...
##  $ Middle.East...North.Africa: int  559311 532509 505748 479499 453786
429070 406017 384629 365051 347344 ...
##  $ North.America       : int  47239 46049 44655 43147 41597 40108
38756 37595 36668 35959 ...
##  $ Sub.Saharan.Africa   : int  3886212 3934691 3984036 4035692

```

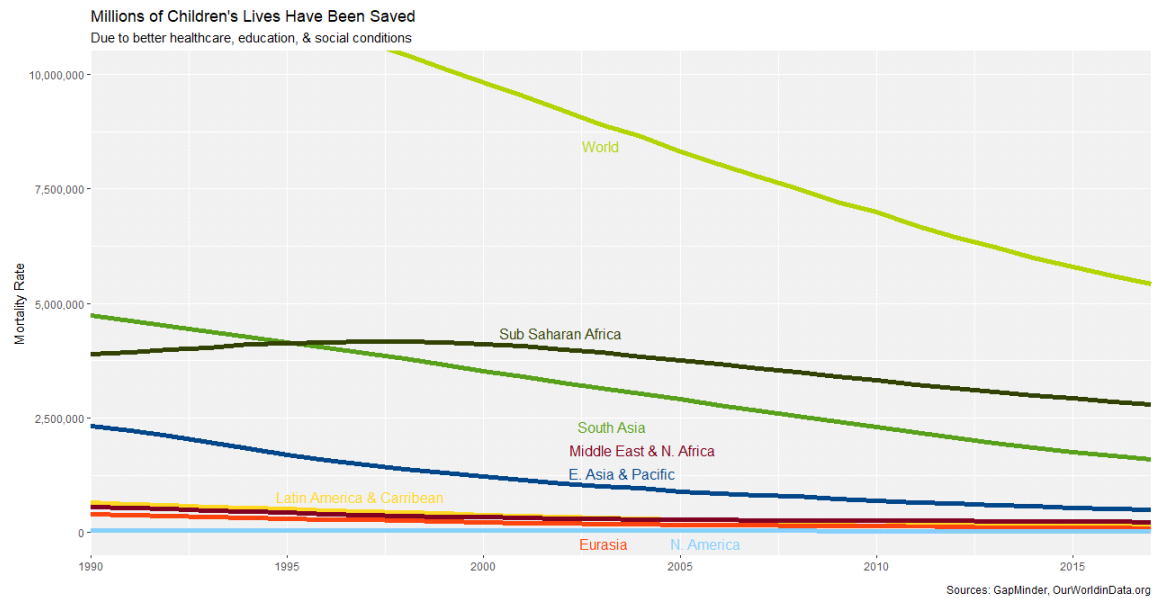
```
4112011 4133132 4143452 4166690 4173055 4147841 ...  
## $ World : int 12581804 12343103 12082871 11813541  
11566819 11269093 10972503 10700054 10425839 10124682 ...
```

```
colnames(lives)[2] <- "E. Asia & Pacific"  
colnames(lives)[3] <- "Eurasia"  
colnames(lives)[4] <- "Latin America & Caribbean"  
colnames(lives)[5] <- "South Asia"  
colnames(lives)[6] <- "Middle East & N. Africa"  
colnames(lives)[7] <- "N. America"  
colnames(lives)[8] <- "Sub Saharan Africa"
```

```
meltedLives <- reshape2::melt(lives, id.var='Year')  
view(meltedLives)
```

```
lifePlot <- ggplot(meltedLives,  
                   aes(x = Year, y = value, col = variable)) +  
  geom_line(size = 2, alpha = 2) +  
  scale_x_continuous(breaks = c(1990, 1995, 2000, 2005, 2010, 2015, 3000),  
                    expand = c(0, 0)) +  
  scale_y_continuous(labels = label_comma()) +  
  coord_cartesian(ylim=c(0, 10000000)) +  
  labs(title="Millions of Children's Lives Have Been Saved",  
        subtitle="Due to better healthcare, education, & social conditions",  
        x=element_blank(),  
        y="Mortality Rate",  
        col = "Countries",  
        caption="Sources: GapMinder, OurWorldinData.org") +  
  scale_color_calc() +  
  theme(legend.position="none") +  
  geom_dl(aes(colour = variable, label = variable),  
         method = list("smart.grid"))
```

```
lifePlot
```



###References

Alex Gray. (2017) Infant mortality has halved since 1990, but there's still work to be done | World Economic Forum. Retrieved March 09, 2020, from <https://www.weforum.org/agenda/2017/03/122-million-one-number-that-proves-how-life-has-changed-for-the-poorest/>

Information Is Beautiful. (2020) Millions of Children's Lives Have Been Saved — Beautiful News. Retrieved , from <https://informationisbeautiful.net/beautifulnews/595-childrens-lives-saved/>