

LineChart

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Create a line chart with ggplot

```
# load required packages
library(ggplot2)
library(here)
library(dplyr)
library(tidyr)
```

First, we need to find the countries with an increase in maternal mortality from 2000 to 2017.

```
# import data
ac.dat <- read.csv(here("data", "analytical", "finaldata.csv"), header = TRUE)

# find countries with an increase in maternal mortality from 2000 to 2017
increase.country <- ac.dat |>
  dplyr::select(country_name, ISO, Year, MatMortality) |>
  dplyr::filter(Year < 2018) |>
  arrange(ISO, Year) |>
  group_by(ISO) |>
  mutate(diffmatmor = MatMortality - MatMortality[1L]) |>
  filter(Year == 2017 & diffmatmor > 0)

# filter the data for selected 13 countries
ac.dat.inc <- ac.dat |>
  filter(country_name %in% increase.country$country_name)
```

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```
ac.dat.inc |>
  ggplot(aes(x = Year, y = MatMortality, color = country_name)) +
  geom_line() +
  geom_point() +
  labs(title = "Trend in Maternal Mortality for Countries with an Increase (2000-2017)",
       x = "Year",
       y = "Maternal Mortality",
       color = "Country") +
  theme_minimal() +
  theme(legend.position = "bottom",
        legend.title = element_text(size = 8),
        plot.title = element_text(hjust = 0, size = 10),
        axis.title = element_text(size = 10),
        axis.text = element_text(size = 8)) +
  scale_x_continuous(breaks = seq(2000, 2017, by = 2))
```

