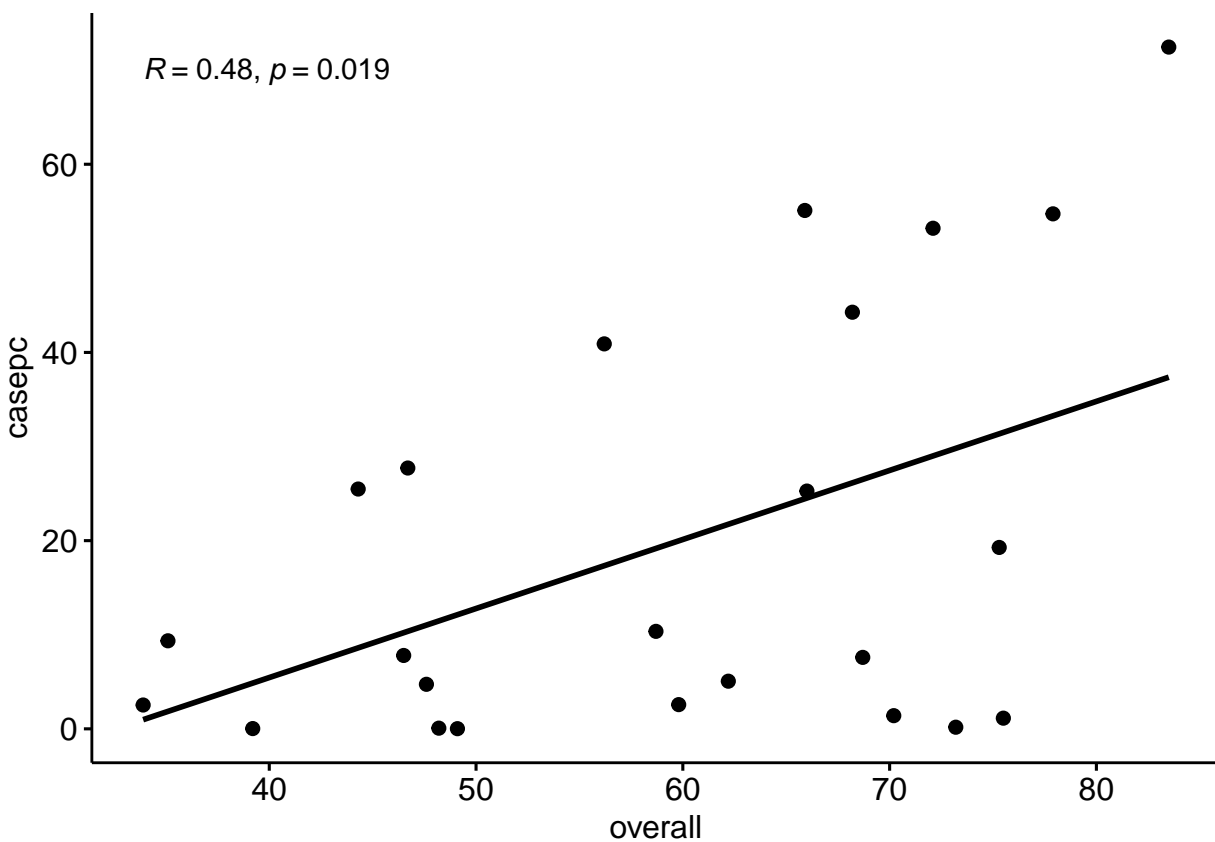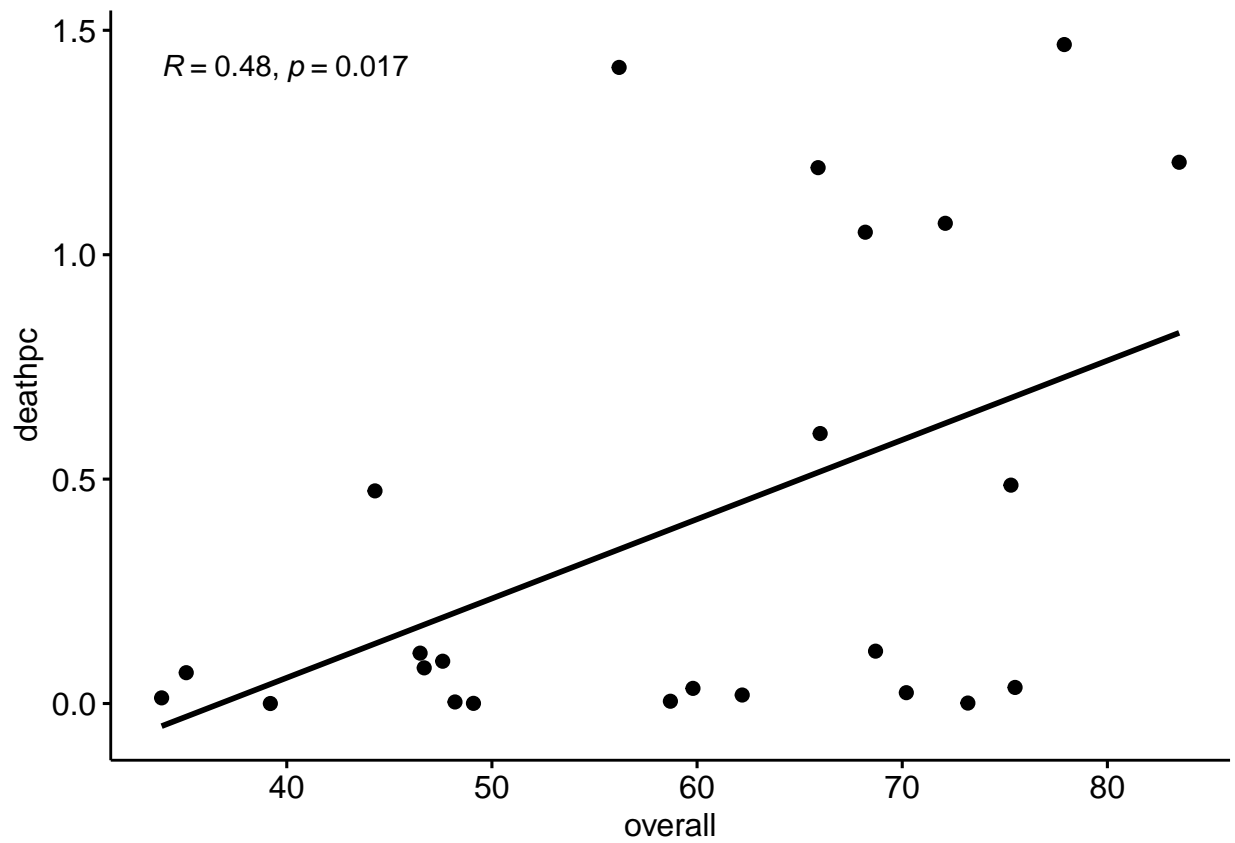# Cumulative Indicator Scatterplots: 360-Day After First Case

```
library(tidyverse)
library(lubridate)
library('ggpubr')
cumulative_data_360day=na.omit(read.csv("..\\prepped_data\\twelvemonth.csv", check.names = FALSE))
```
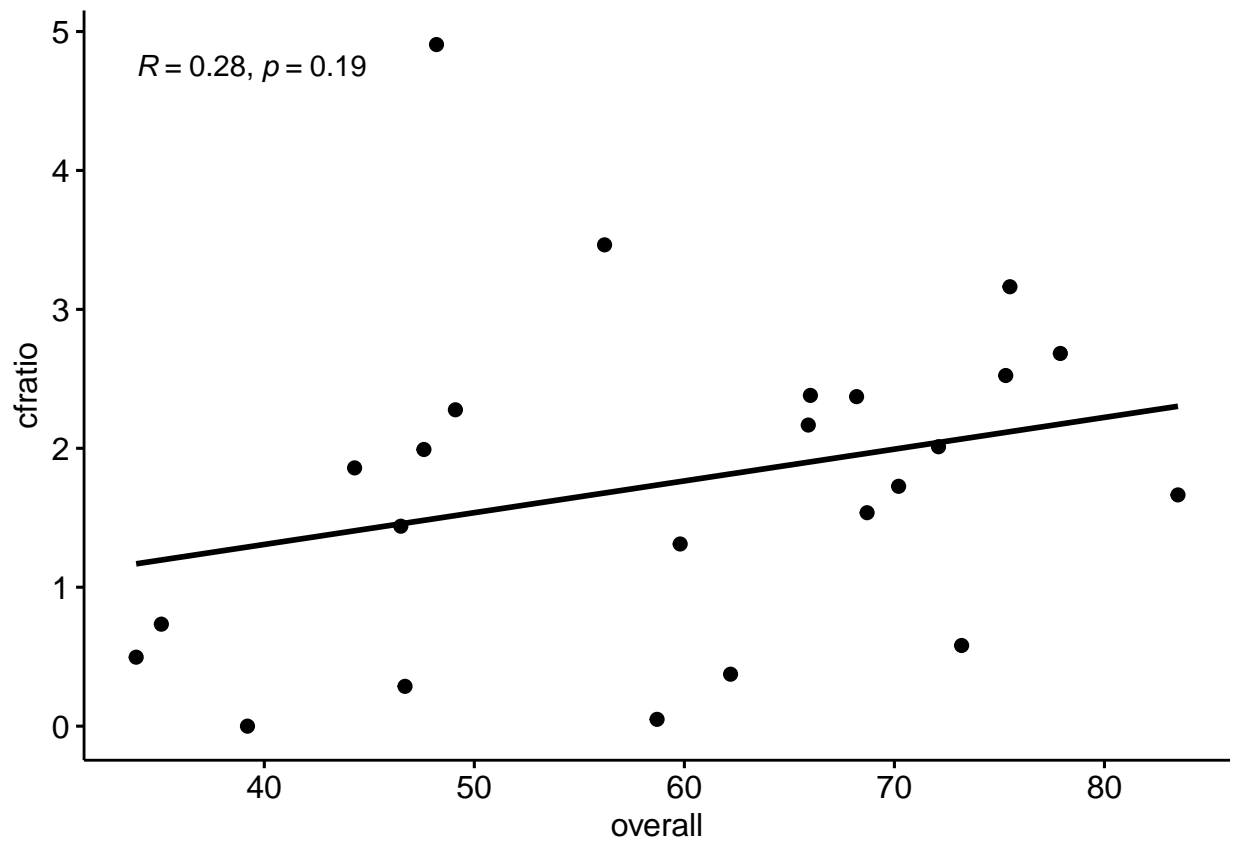
```
ggscatter(cumulative_data_360day,x='overall',y='casepc',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='overall',ylab='casepc')
```
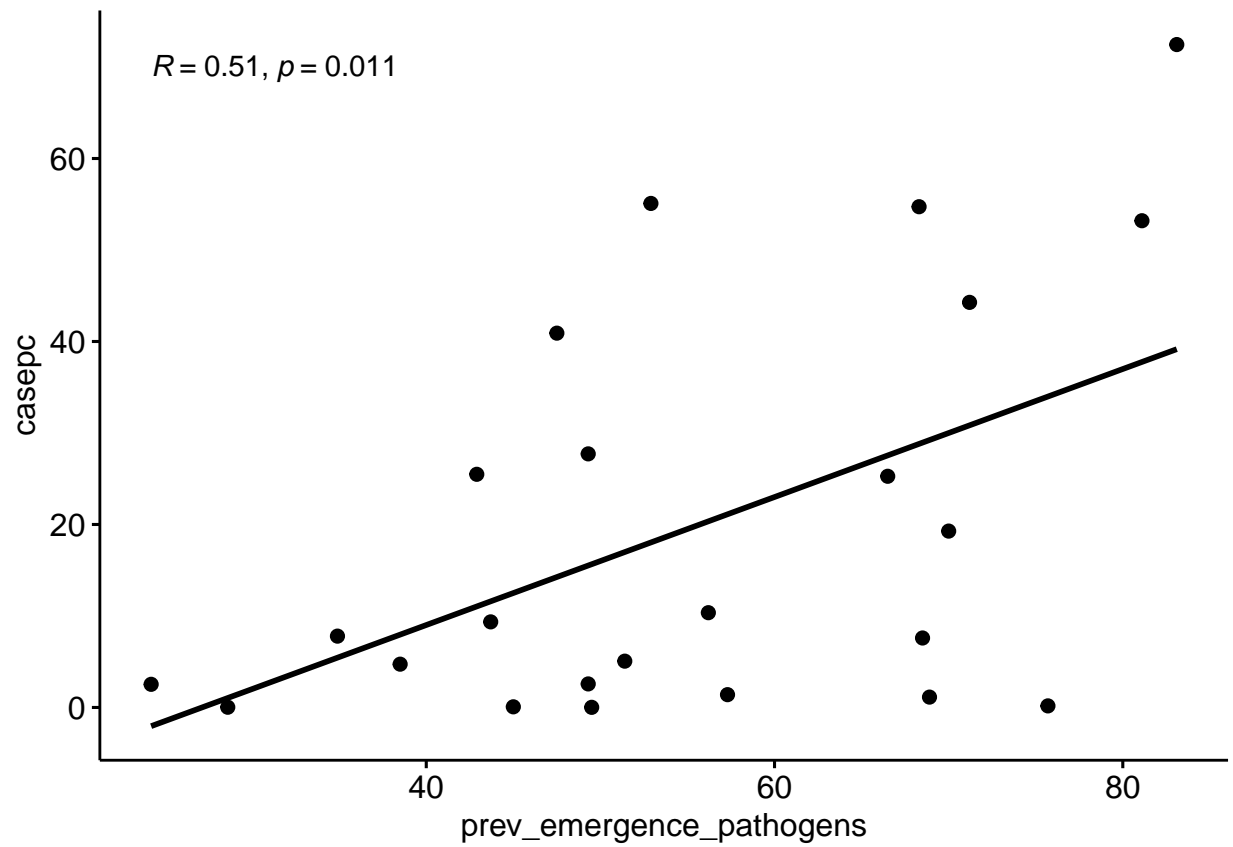
```
ggscatter(cumulative_data_360day,x='overall',y='deathpc',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='overall',ylab='deathpc')
```
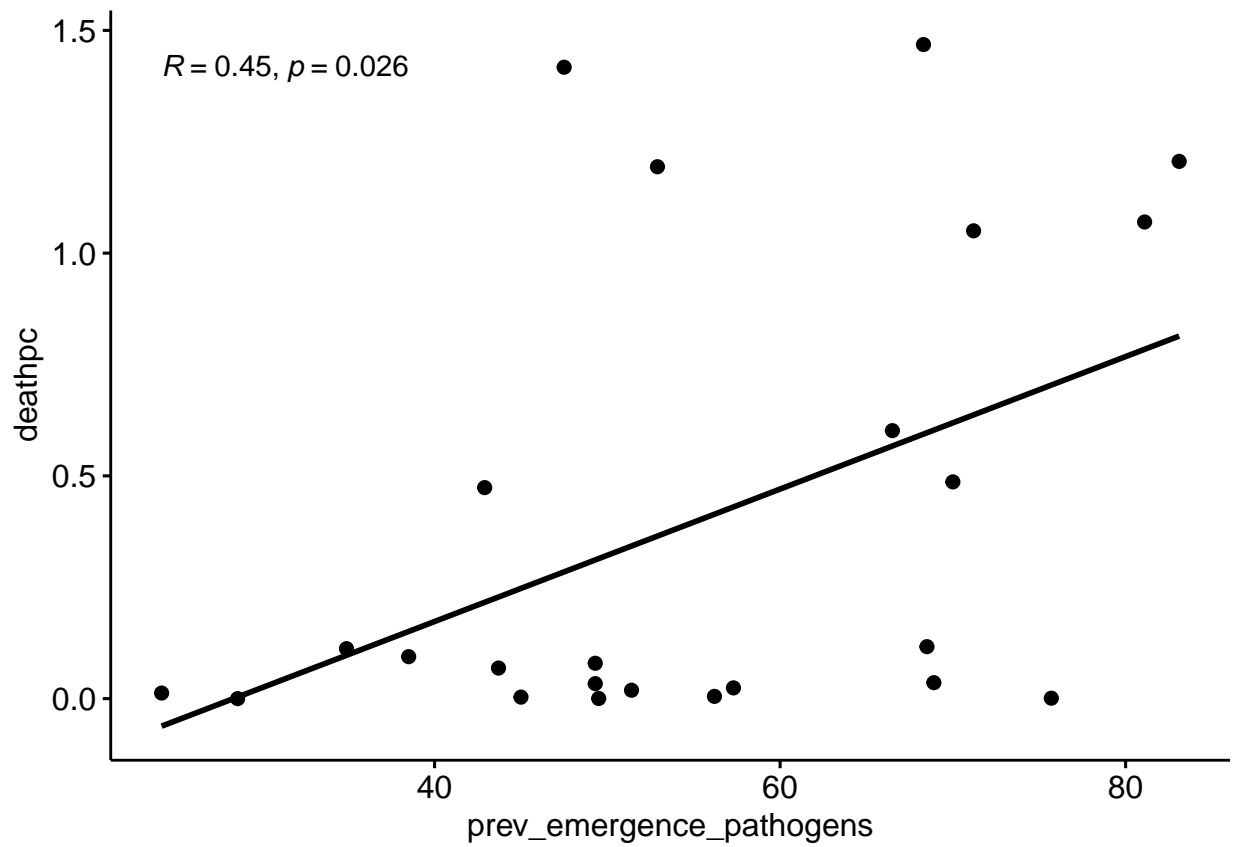
```
ggscatter(cumulative_data_360day,x='overall',y='cfratio',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='overall',ylab='cfratio')
```
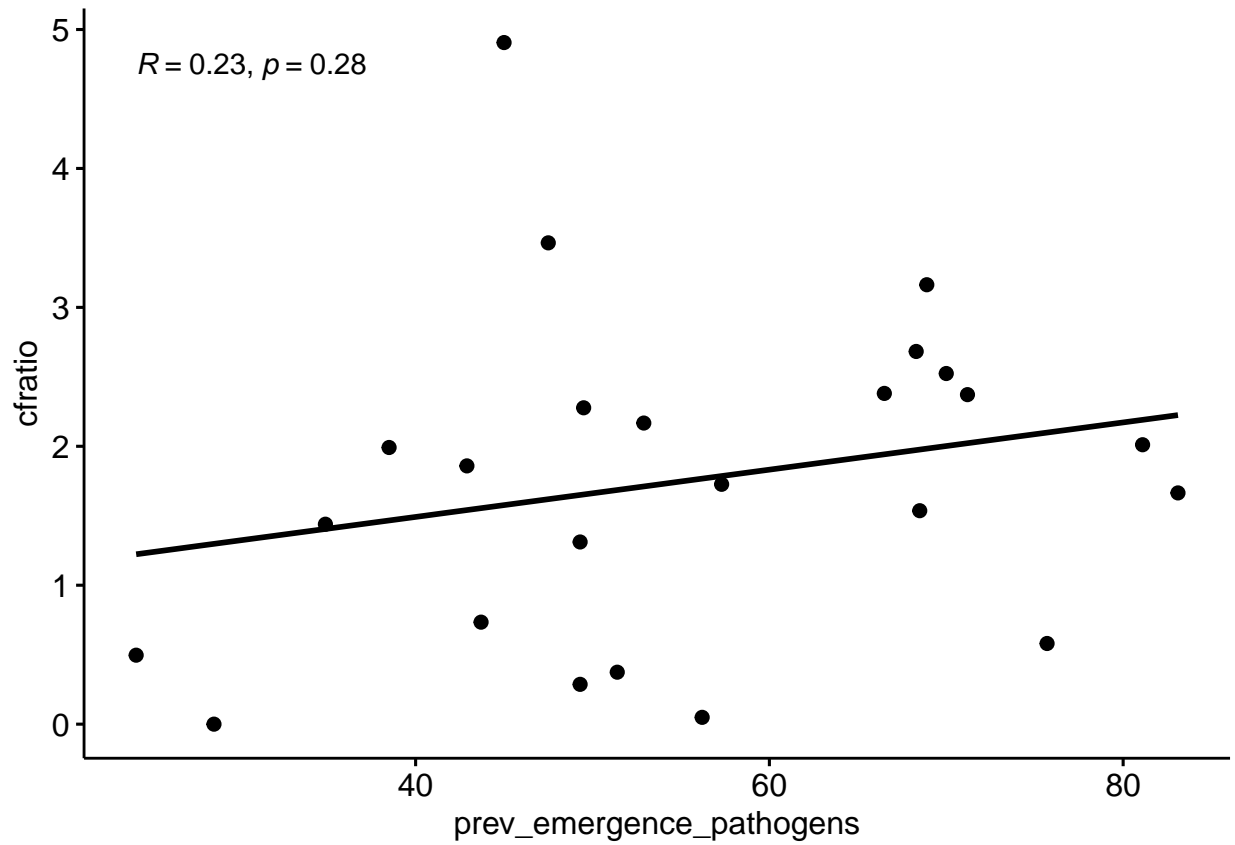
```
ggscatter(cumulative_data_360day,x='prev_emergence_pathogens',y='casepc',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='prev_emergence_pathogens',ylab='casepc')
```
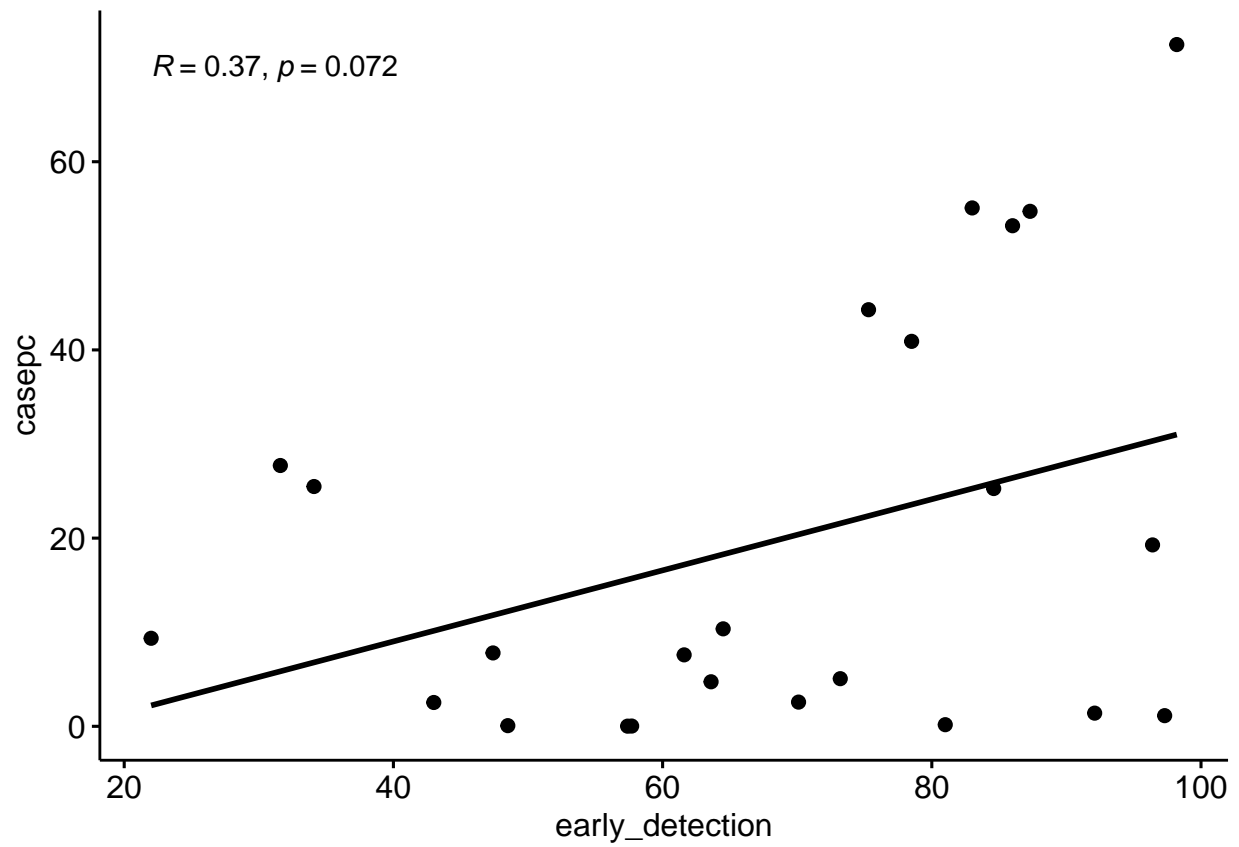
```
ggscatter(cumulative_data_360day,x='prev_emergence_pathogens',y='deathpc',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='prev_emergence_pathogens',ylab='deathpc')
```
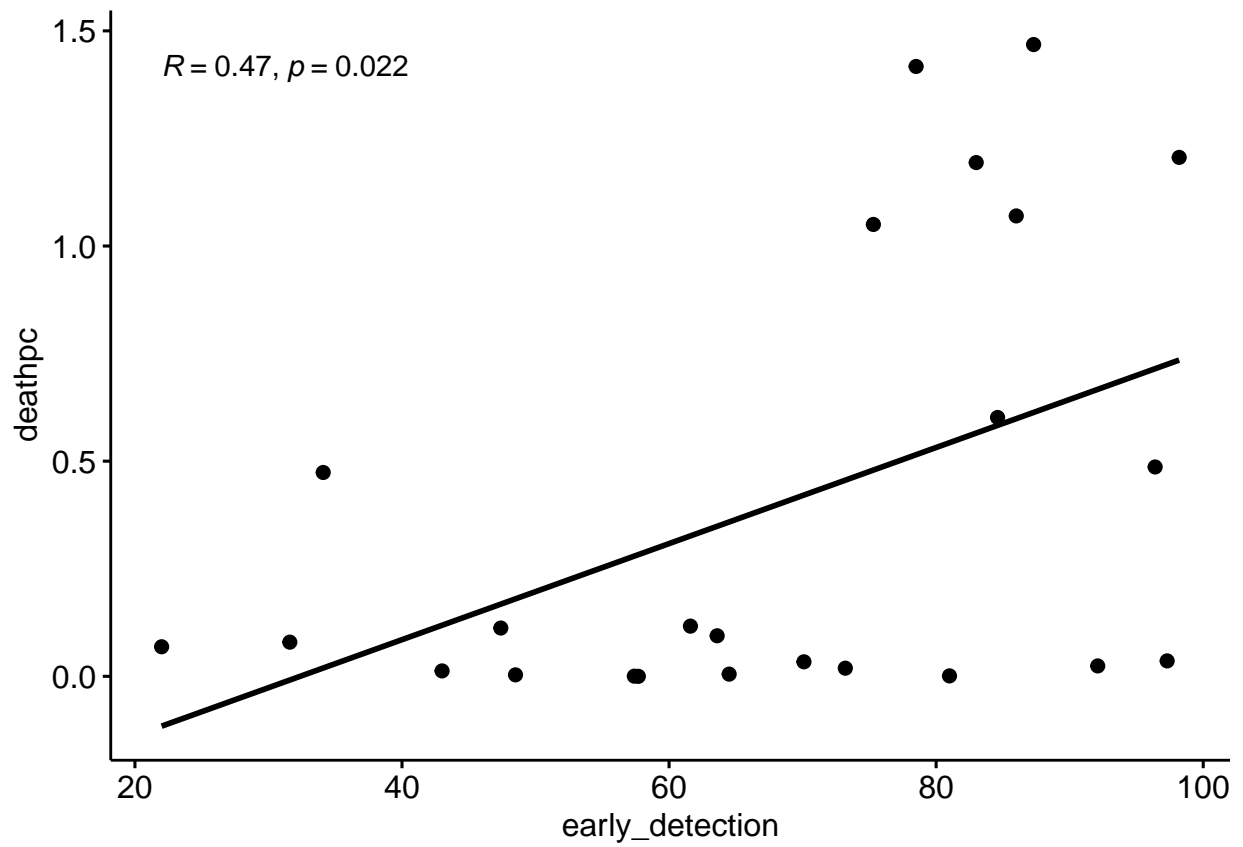
```
ggscatter(cumulative_data_360day,x='prev_emergence_pathogens',y='cfratio',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='prev_emergence_pathogens',ylab='cfratio')
```
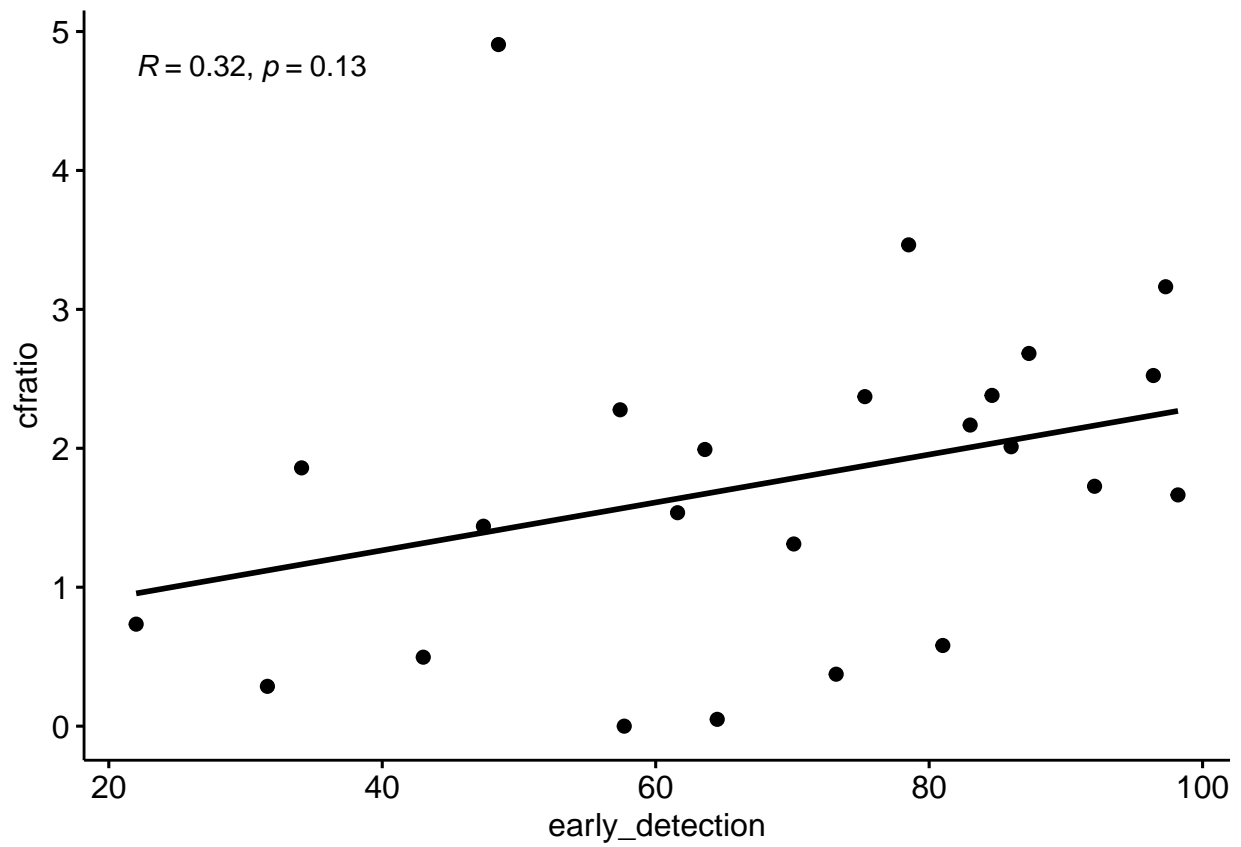
```
ggscatter(cumulative_data_360day,x='early_detection',y='casepc',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='early_detection',ylab='casepc')
```
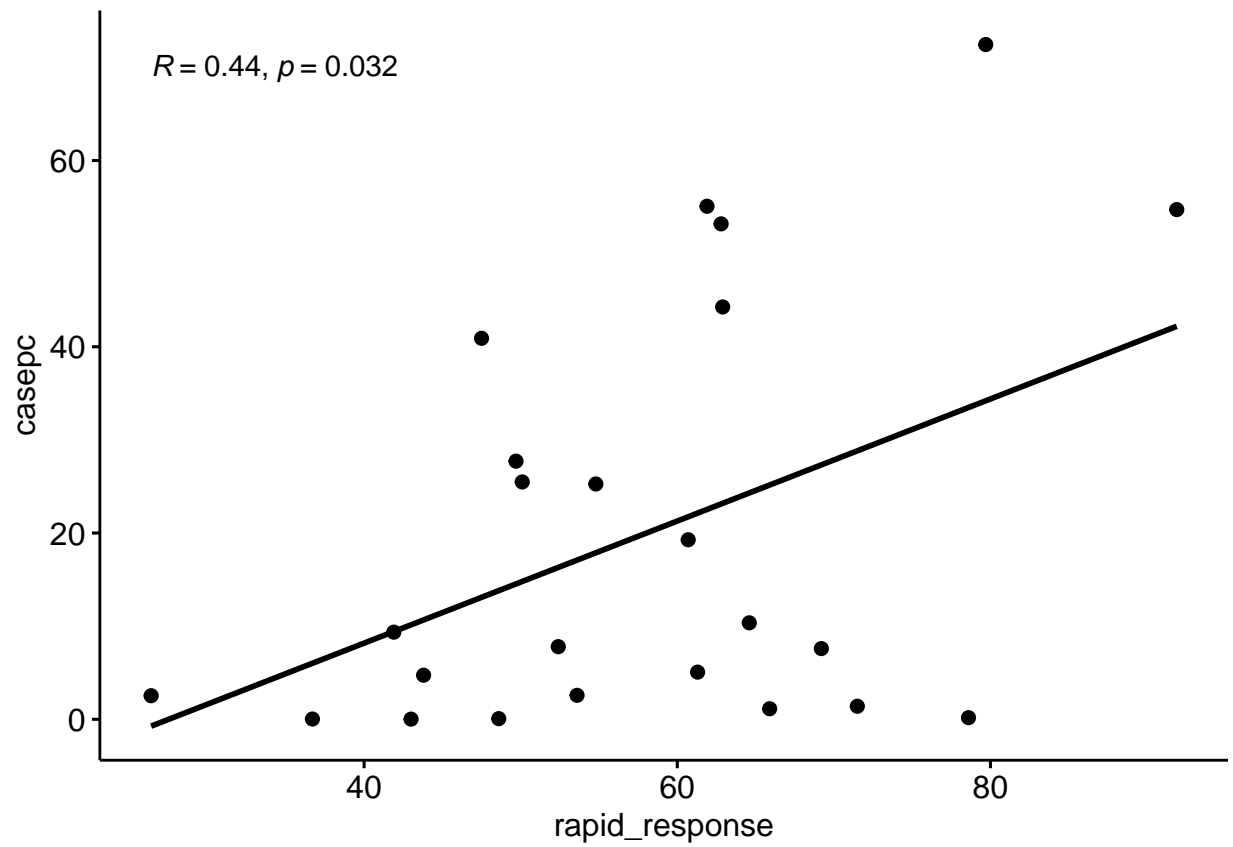
```
ggscatter(cumulative_data_360day,x='early_detection',y='deathpc',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='early_detection',ylab='deathpc')
```
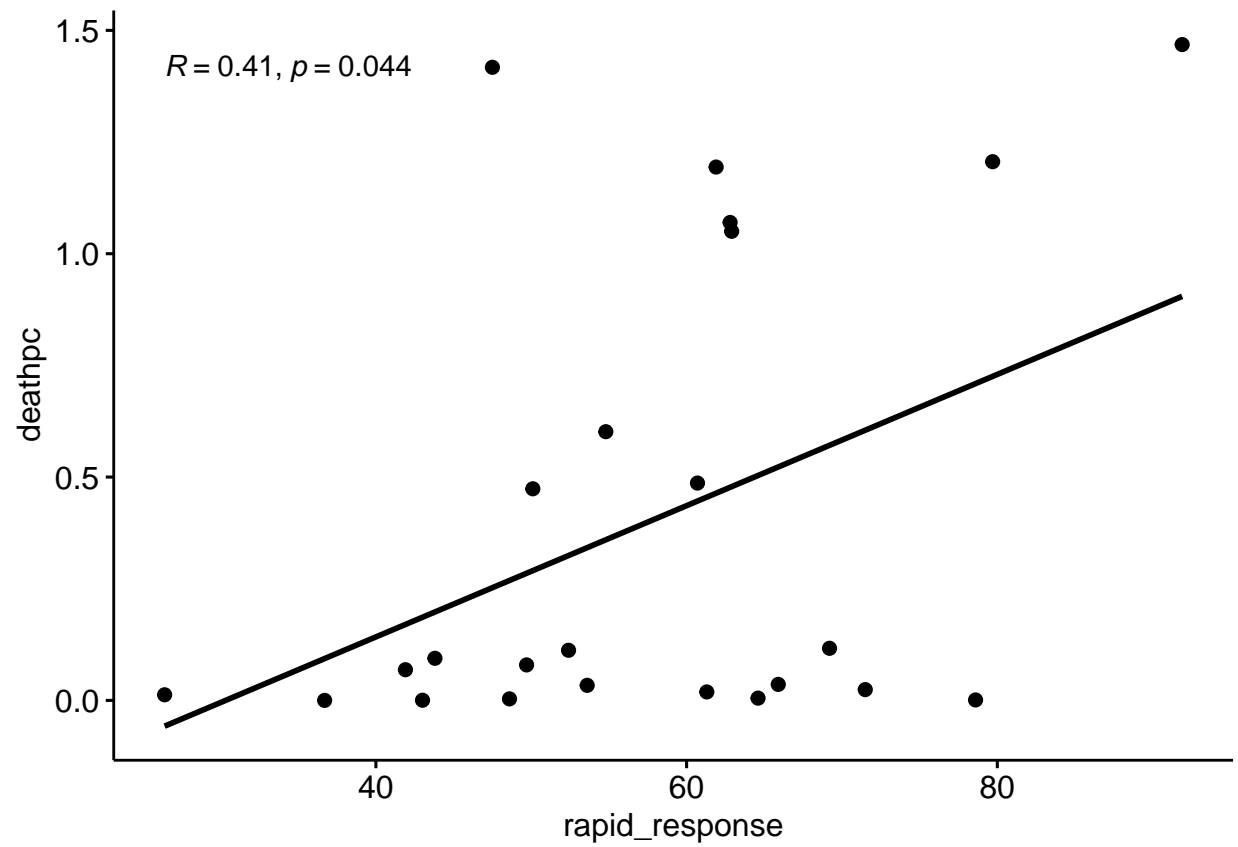
```
ggscatter(cumulative_data_360day,x='early_detection',y='cfratio',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='early_detection',ylab='cfratio')
```
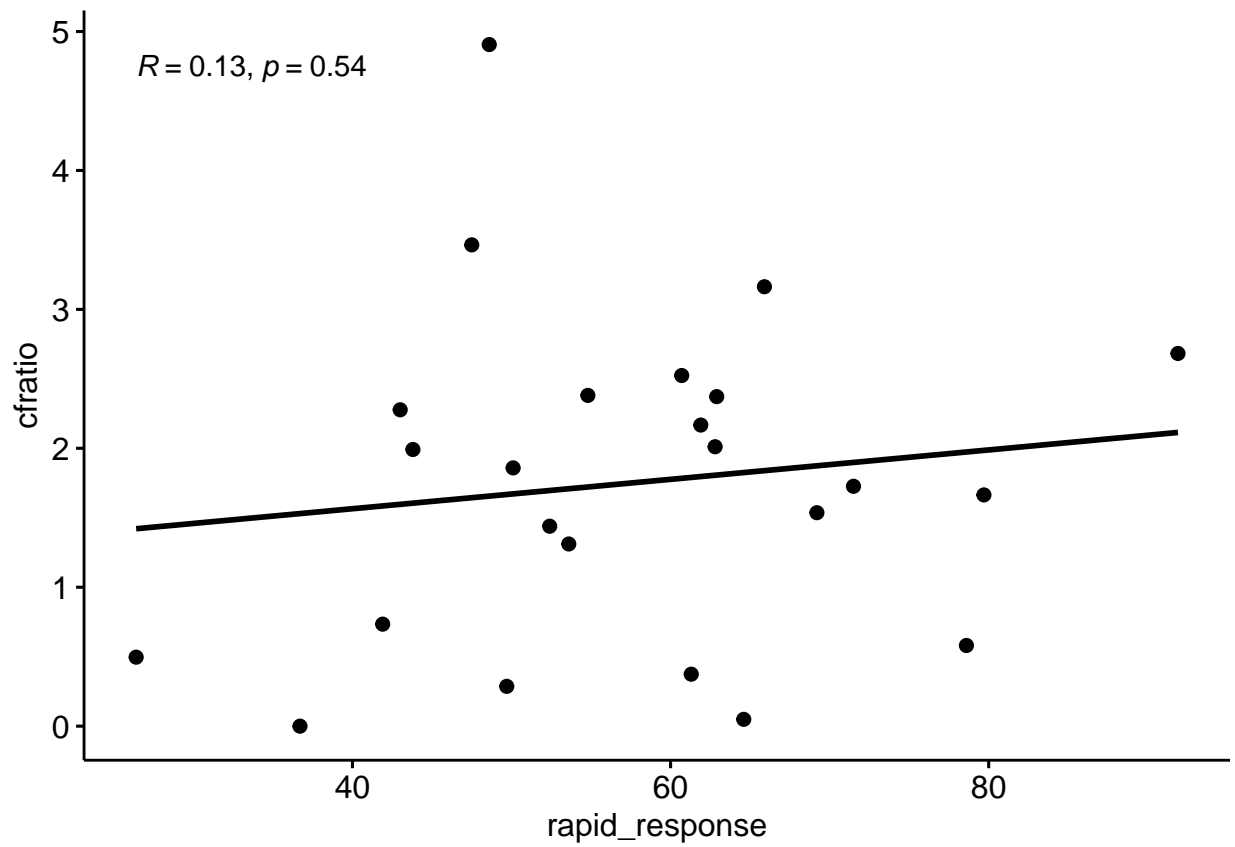
```
ggscatter(cumulative_data_360day,x='rapid_response',y='casepc',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='rapid_response',ylab='casepc')
```
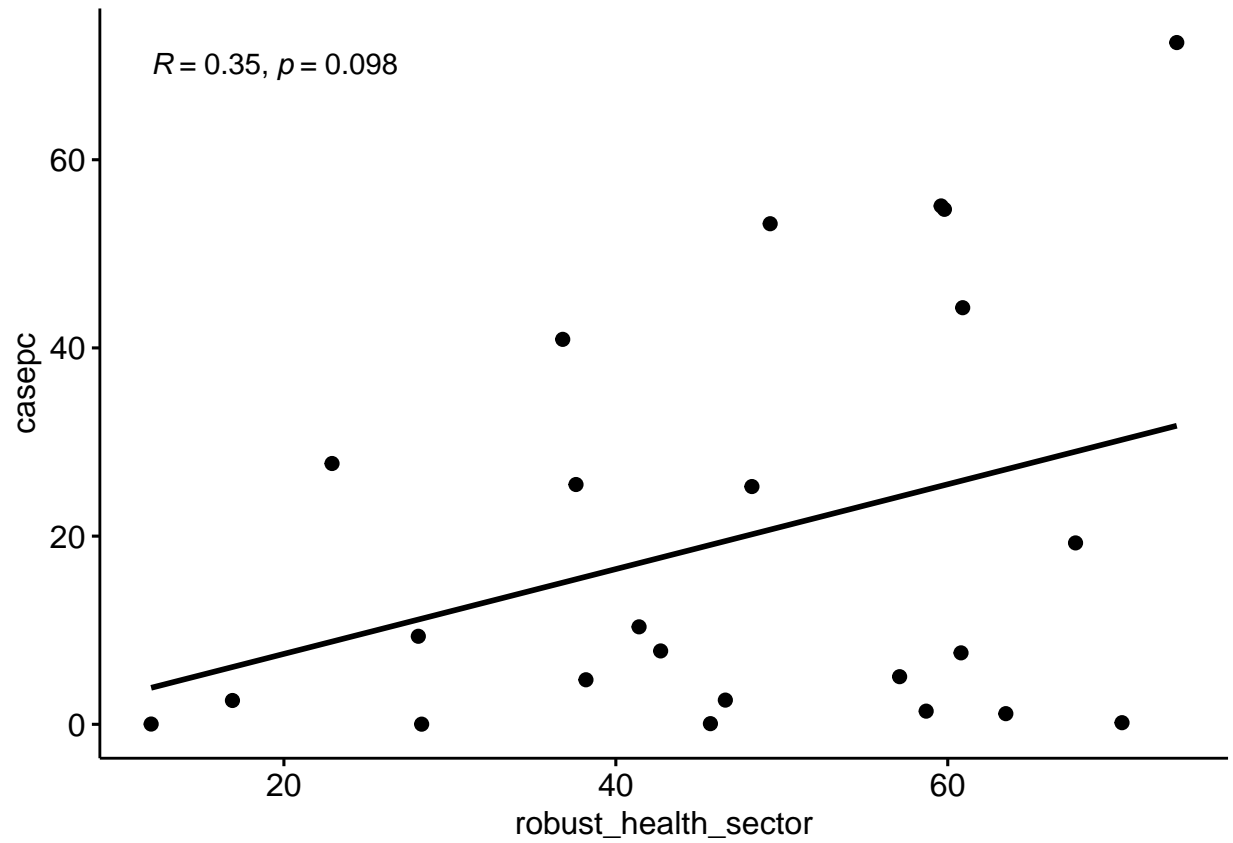
```
ggscatter(cumulative_data_360day,x='rapid_response',y='deathpc',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='rapid_response',ylab='deathpc')
```
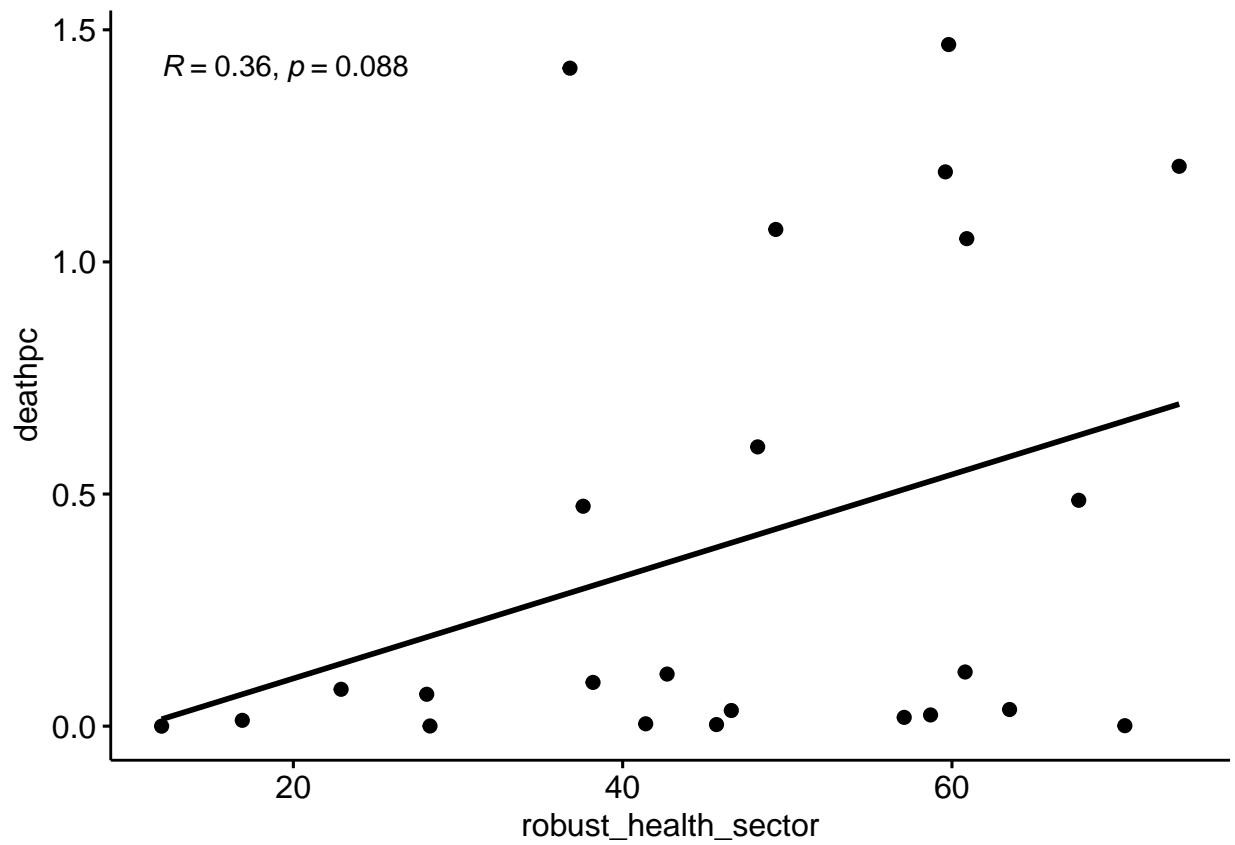
```
ggscatter(cumulative_data_360day,x='rapid_response',y='cfratio',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='rapid_response',ylab='cfratio')
```
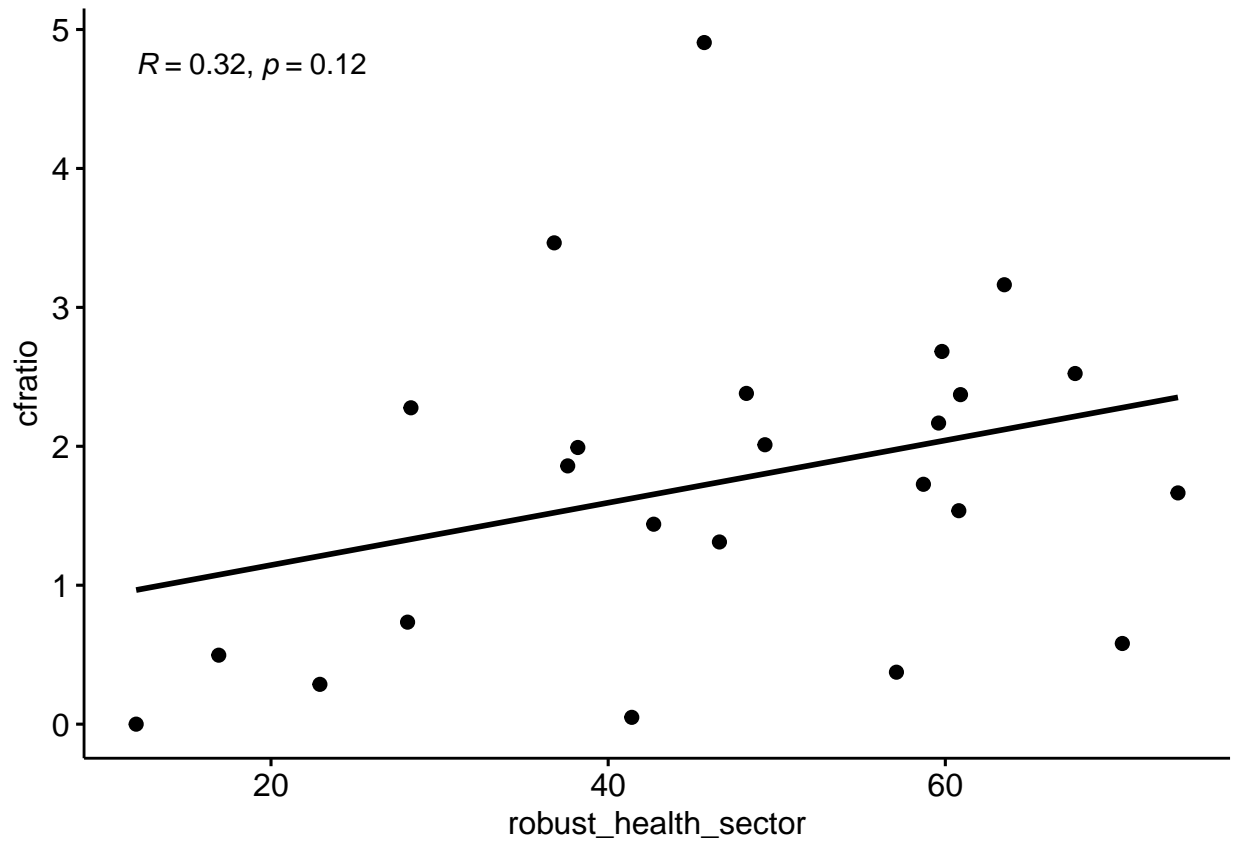
```
ggscatter(cumulative_data_360day,x='robust_health_sector',y='casepc',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='robust_health_sector',ylab='casepc')
```
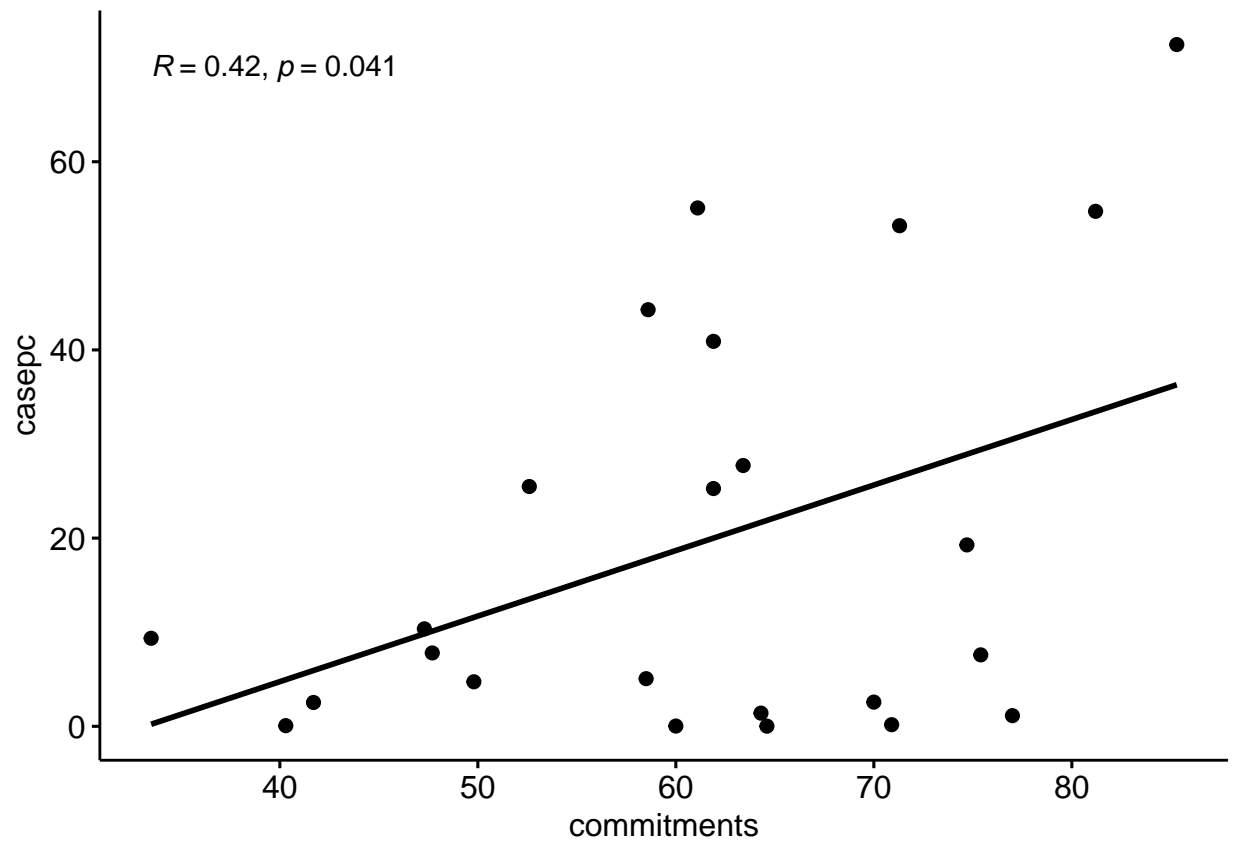
```
ggscatter(cumulative_data_360day,x='robust_health_sector',y='deathpc',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='robust_health_sector',ylab='deathpc')
```
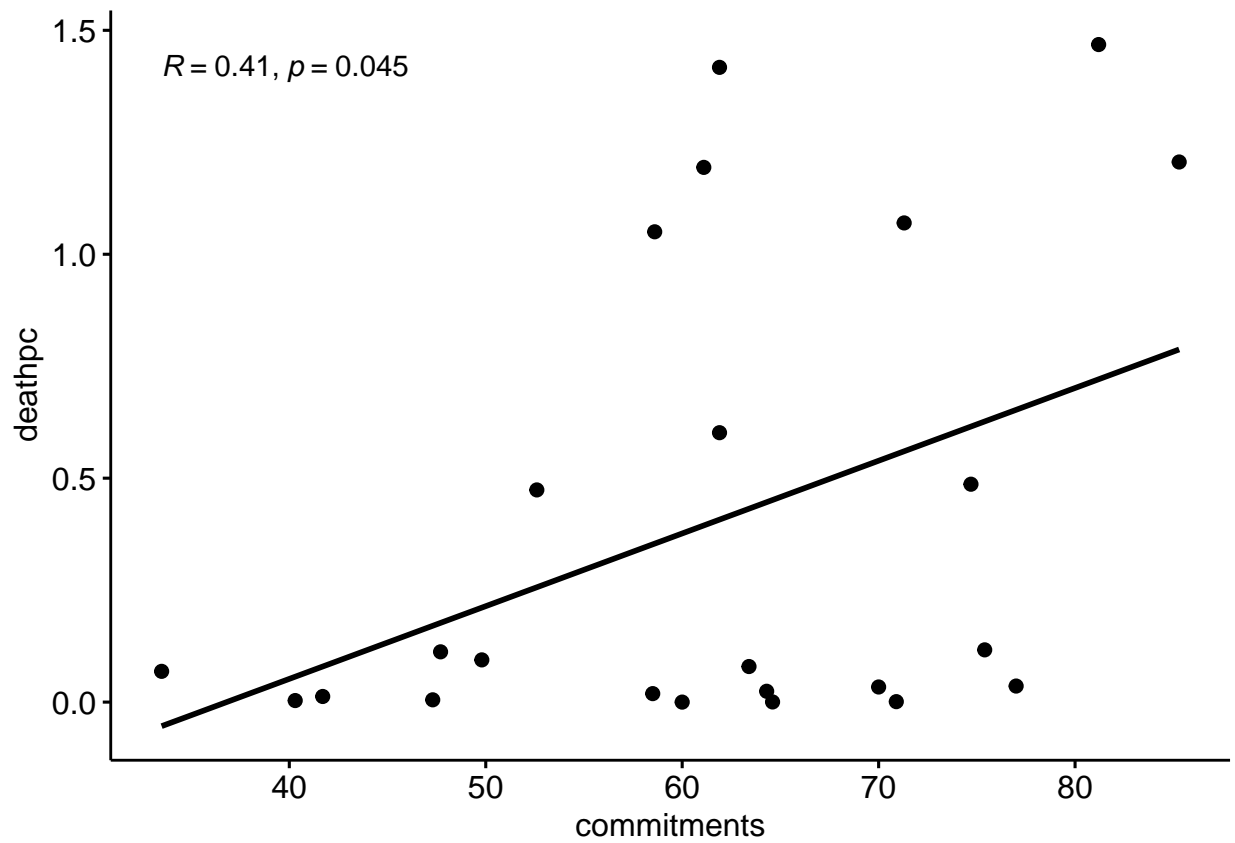
```
ggscatter(cumulative_data_360day,x='robust_health_sector',y='cfratio',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='robust_health_sector',ylab='cfratio')
```
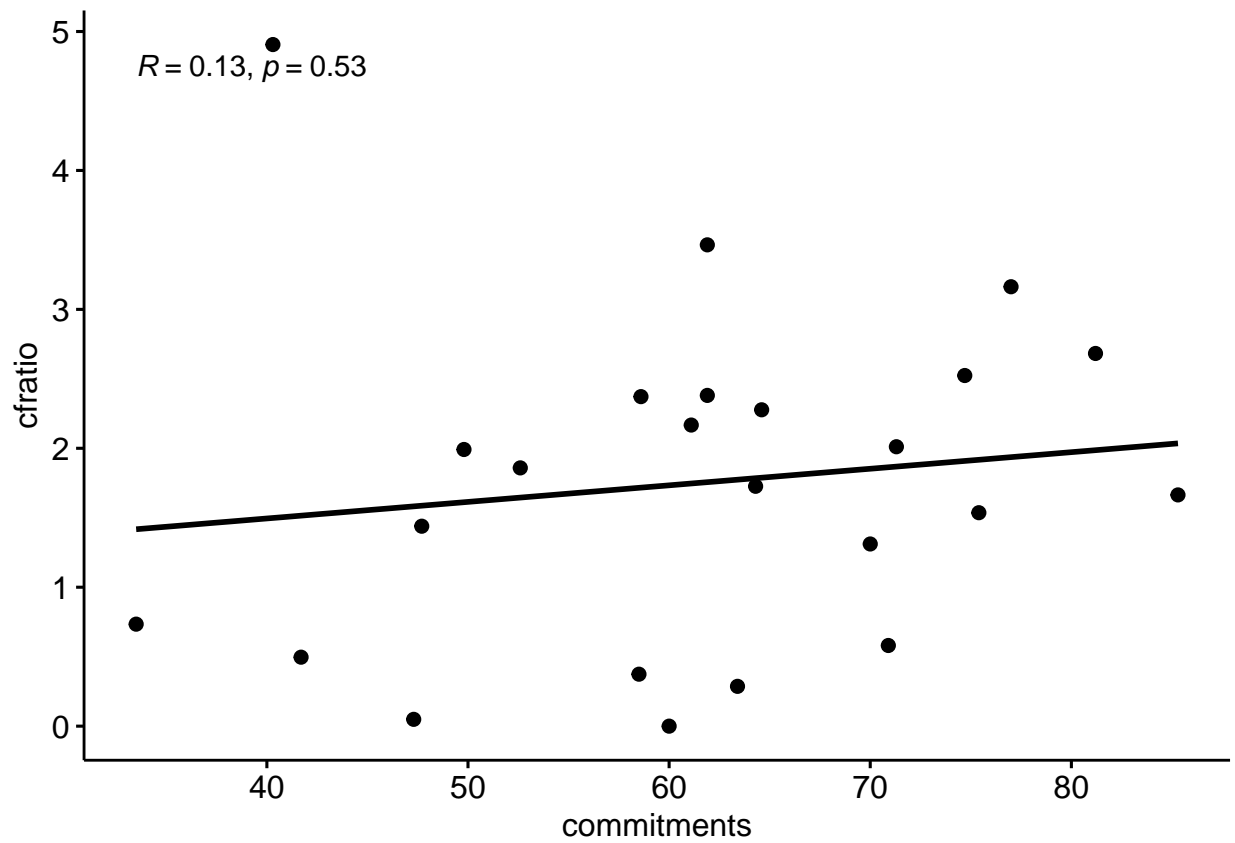
```
ggscatter(cumulative_data_360day,x='commitments',y='casepc',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='commitments',ylab='casepc')
```
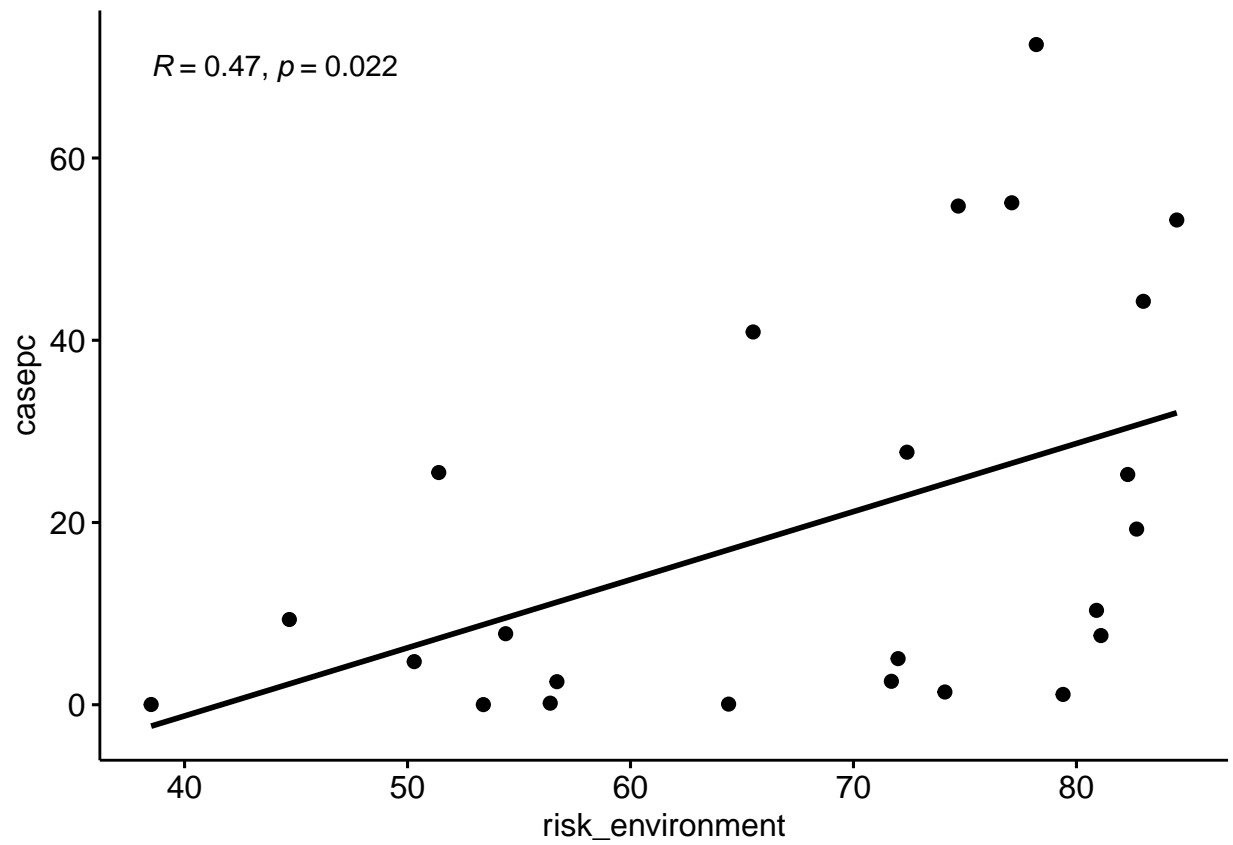
```
ggscatter(cumulative_data_360day,x='commitments',y='deathpc',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='commitments',ylab='deathpc')
```
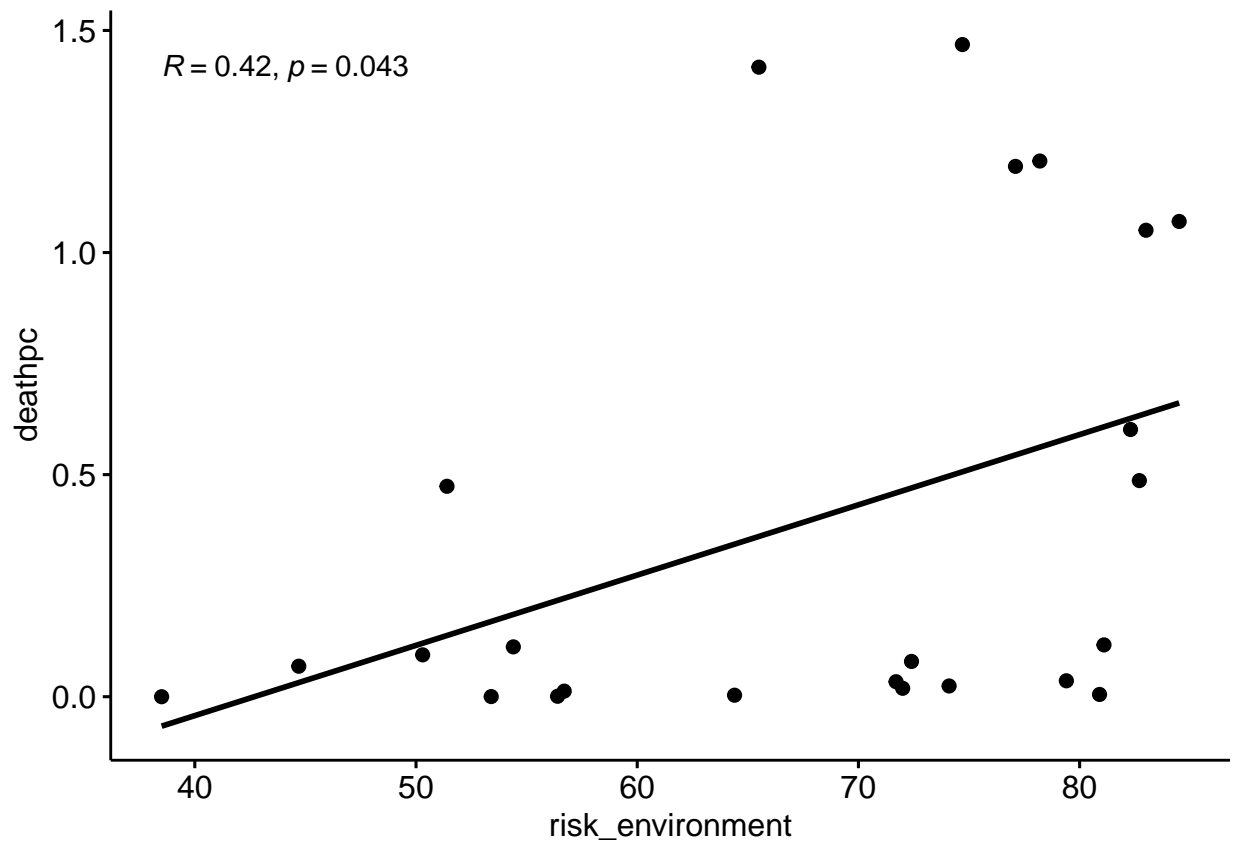
```
ggscatter(cumulative_data_360day,x='commitments',y='cfratio',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='commitments',ylab='cfratio')
```

```
ggscatter(cumulative_data_360day,x='risk_environment',y='casepc',
         add='reg.line',cor.coef=TRUE,cor.method='pearson',
         xlab='risk_environment',ylab='casepc')
```


$R = 0.47, p = 0.022$

```
ggscatter(cumulative_data_360day,x='risk_environment',y='deathpc',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='risk_environment',ylab='deathpc')
```

$R = 0.42, p = 0.043$

```
ggscatter(cumulative_data_360day,x='risk_environment',y='cfratio',
          add='reg.line',cor.coef=TRUE,cor.method='pearson',
          xlab='risk_environment',ylab='cfratio')
```


$R = 0.26$, $p = 0.21$