Changing trends in the prevalence of *H. pylori* infection in Japan (1908-2003): a systematic review and meta-regression analysis of 170,000 individuals

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BACKGROUND

- ▶ Gastric cancer burden remains high in Japan, where it is the second-leading cause of cancer deaths, accounting for annual deaths of approximately 50,000 in Japan.
- ▶ Substantial evidence supports a central role for *H. pylori* in the parthenogenesis of upper-gastrointestinal diseases, including peptic ulcer and noncardia gastric cancer.
- \triangleright Cross-sectional studies have suggested that the prevalence of H. pylori infection increases with age, while the whole picture remains obscure.
- We systematically reviewed the existing literature that presented estimates of the prevalence of *H. pylori* infection in the Japanese population.
- ▶ The obejectives are: (1) to derive a robust prevalence estimate of H. pylori infection by birth year; (2) to clarify whether H. pylori infection exhibits a birth-cohort pattern.

Quick start

Before starting, you have to install R, RStudio, bookdown package, and other software and packages (i.e. Pandoc, LATEX, rmarkdown, rticle, knitr, etc.) which bookdown depends on. See the official manual of bookdown for details.

Installation:

devtools::install_github("pzhaonet/bookdownplus")

Run the following codes, and you will get some files (e.g. index.Rmd and body.Rmd) and folders in your working directory.

bookdownplus::bookdownplus()

Now press ctrl+shift+b to compile it. Your will get a book file named index.pdf in _book/ folder.

Write your own text in index.Rmd and body.Rmd, and build your own lovely book. Have fun!

Graphs

Using bookdown or rmarkdown, users can insert figures into a document in a friendly way. Just embed the R scripts into your .Rmd file(s) and compile it/them with knitr package, and the figures will appear automatically with high resolution and reproductivity.

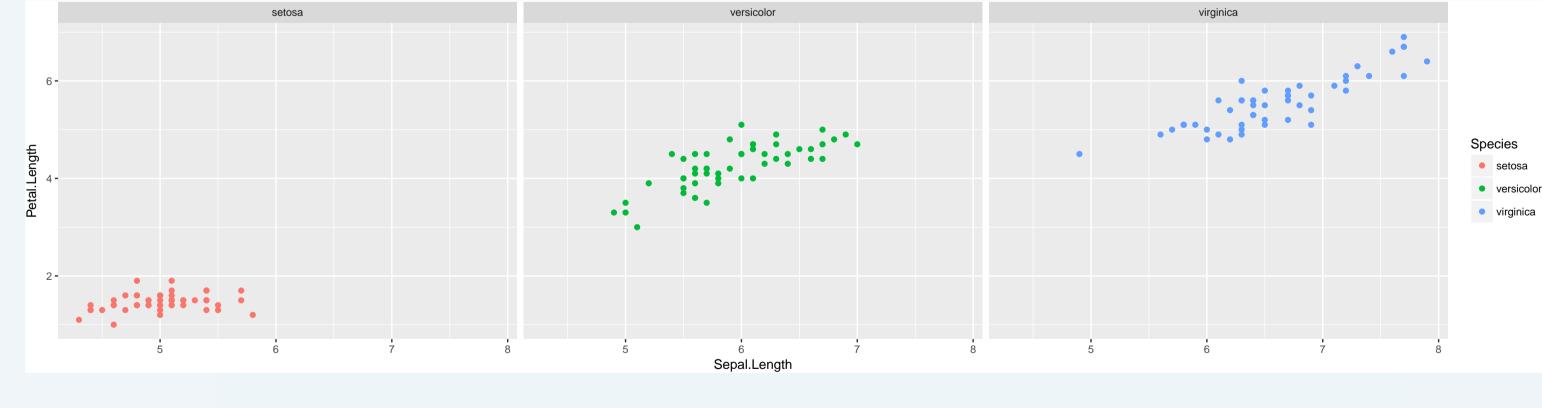


Figure 1: IRIS data plotted with R ggplot2 package.

Table

Similarly to graphs, tables can be inserted either with R script or with markdown syntax.

Sepal.Length Sepal.Width Petal.Length Petal.Width Species

•			<u> </u>
5.1	3.5	1.4	0.2 setosa
4.9	3.0	1.4	0.2 setosa
4.7	3.2	1.3	0.2 setosa

Bibliography

Zhao, P (2017). R bookdownplus: Enhancement of bookdown for writing varied types of books and documents.

Book types supported by bookdownplus

Some sample pages are displayed as follows. More details can be found in the tutorial book (Zhao, 2017).



Take-home message

luctus et ultrices posuere cubilia Curae; Nam lacus mi,

Aliquam egestas sollicitudin mauris. Maecenas quis massa

volutpat bibendum, ullamcorper in, imperdiet vel, purus.

euismod tortor interdum consectetuer. Mauris rutrum leo

R bookdownplus is an extension of bookdown for academic and literal writing, especially for reproducible reports.

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R bookdownplus is still being developed. Feel free to join me either in contributing templates to my Github repo a, or in writing the tutorial of R bookdownplus (Zhao, 2017).

^ahttps://github.com/pzhaonet/bookdownplus

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