

Fundamental Epidemiology Study Designs

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3/20/25

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Preface

I am on a journey to pursue my master's degree. I started writing this notes as a way to summarize what I have learned from the course. It will be basic and may contain some errors or mistakes. If you have time to go through it, I would be grateful for your feedback. Most of the content here is taken from the Distant Learning Epidemiology Master's Programme provided by [London School of Hygiene and Tropical Medicine](#), with some modifications taken from the book Modern Epidemiology, 4th edition (Lash et al. 2021) and the Introduction to Biostatistics course provided by Prof. Ronald Geskus and his team at Oxford University Clinical Research Unit, Ho Chi Minh.

Introduction

Part I

Basic concepts

1 Fundamental epidemiology

“The study of the occurrence and distribution of health-related events, states, and processes in specified populations, including the study of the determinants influencing such processes, and the application of this knowledge to control relevant health problems.” (Porta 2014)

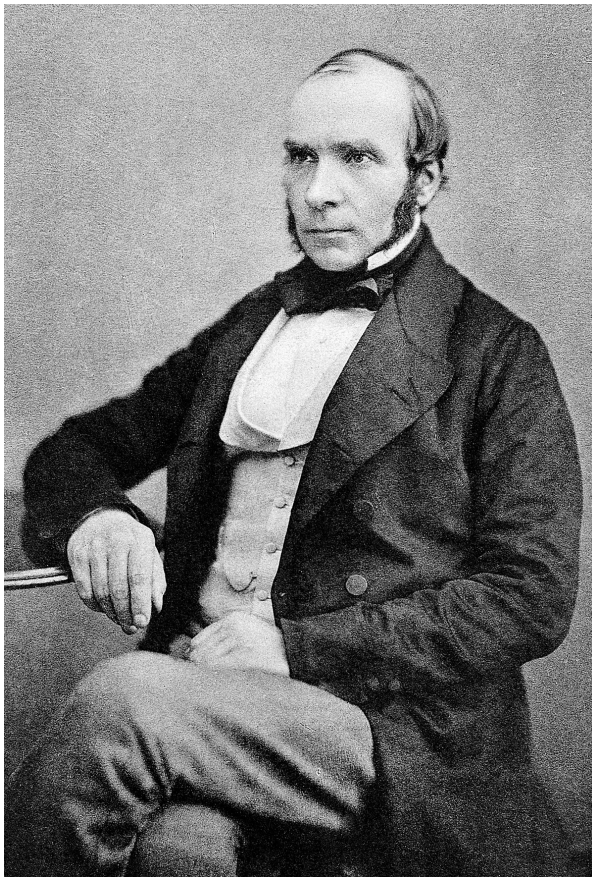


Figure 1.1: John Snow



Figure 1.2: His study pump

Jhon Snow example: For short, in 19th century, cholera expand all over Europe and UK. Estimated 15,000 recorded deaths in London in 1848-9. Snow (an anaesthetist) came up with some hypothesis: