# Planning the scientific presentation of March 20th

Epidemiological methods in medical research 2025

# **Timeline**

* Preparation: reflexion about a subject: who, what, why, how

 fill the project description template (see below)

* 20th February (17.00): send an email with the project description
* 17th March (17.00): send an email with the title+short abstract in the body of the email

 and the pdf of the presentation in attachment

* 20th March (13.00-17.00): the class is split in 2 groups (BO, KSL),

 Each student has 10 min for the presentation and 8 min discussion

Emails should be sent to brice.ozenne@nru.dk.

⚠ Please start the name of the files you send by your name, followed by the type of document, and ending with the short title for your project, e.g. “Brice Ozenne – slides – How to interprete an hazard ratio.pdf”.

# **About the presentation**

To exemplify and discuss the use of epidemiological concepts/statistical methods

* Ideally based on one of your Ph.D. project: can be a study you are doing, have already published, or that you are planning (pre-register a study <https://aspredicted.org/>).

Otherwise based on a scientific paper (e.g. identify a methodological challenge you met during your Ph.D. and look for one or few articles on the subject)

⚠ Less is often better. Prefer to present in detail how you evaluate and communicate about the association between one exposure and one outcome than to present all the results from a project.

* Can be done alone or in pairs
* Can be about: how ‘standard methods’ can be used in your research

 how to communicate results from ‘standard methods’

 how specificities in your study design challenges ‘standard methods’

 pro/cons of two designs or statistical methods (traditional vs. new) in your field

⚠ the focus should be on the methodology more than on the clinical relevance/originality.

⚠ should be focused about a specific point – not a description of your Ph.D.

Recommended structure:

* introduce the context - 1 or 2 slide
* describe the research question - 1 slide
* describe the methodology (data collection, statistical approach) – 2 or 3 slides

⚠ avoid listing statistical methods. Instead first state what you want to estimate (e.g. ratio between the 1 year risk of death with disease A vs. disease B) and then how you estimate it.

* brief representation of the data + one or two key results – 2 or 3 slides

⚠ graphical representations are encouraged: e.g. do not just report a hazard ratio, illustrate the survival for (specific) patients under the different exposures.

* conclusion and comments about the strength/weakness of the methodology – 1 slide

(adequation between the methodology and the research question)

# **About the short abstract**

To give an idea about the content of the talk to the other students and to the teacher

* It does NOT need to follow the usual “intro/method/results/discussion” format
* Short is good (around 50-100 words): just describe in a few sentences what is your key message or what you are going to present, e.g.:

“In this presentation I will present the analysis of registry data to investigate whether hormonal contraceptive should be considered as a risk factor for depression. I have been using a Cox model to model this association and use survival curves to illustrate the risk of depression under different type of contraception. One difficulty I met was that some women changed type of contraception during their follow-up and I will discuss solutions I considered.”

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| **Project description** |
| **Name:** |
| **Content:** on what topic would you like to present? Alone or in pair (with who)? own research or article from the literature? Which article?  what would be the take home message or key discussion point? |
| **Form:** will you follow the usual intro/method/result/discussion? what do you anticipate will be difficult to communicate? visual / graphical illustration that could summarize the key message  |
| **Barriers**: what may limit your ability to make progress and possible remediesPractical (e.g. access to data, time, coordination with the other student, …)Theoretical (e.g. defining a research question, understanding of a statistical method, programming skills, …) |
| **Feedback to the teacher:**  |